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Gen-Probe Incorporated; San Diego, CA
Location/Qualifiers
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Gen-Probe Incorporated; San Diego,
Location/Qualifiers
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Gen-Probe Incorporated; San Diego, CA
Location/Qualifiers
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Carter, N.M.
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Nucleic acid probes complementary to human
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Patent: US 6583278-A 4 24-JUN-2003;
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AR577462
AR577462.1
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                                               impfung
Patent: WO 0075336-A 7 14-DEC-2000;
Biovector Therapeutics S.A. (FR); ;
de la Recherche Medicale (INSERM) (formula de la Recherche Medicale)
                                                                                                                                                                                                                                                                                                                                  ب
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 (bases 1 to 87)
Choppin, J., Villada, I.B., Guillet, J.-G., Connan, F. Polyepitopic proteinic fragments of the E6 and E7 production and use thereof in vaccines Patent: US 6783763-A 7 31-AUG-2004;
Peptide Immune Ligands and Institut National de la Recherche Medicale (INSERM); Labege, Cedex;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 GACATTATTGTTATAGTTTGTATGGAAC 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28;
                                                                                                       Proteinfragmente die verschledene epitope der hpv proteine e6 und e7 umfassen, ihre herstellung und verwendungen insbesondere zur
                                                                                                                                                                             synthetic construct synthetic construct
                                                                                                                                                                                                                         87 bp
Sequence 7 from Patent WO0075336.
AX057044
                                                                                                                              Ferries, E.
                                                                                                                                        Choppin, J., bourgault Villada, I., Guillet, J.G.,
                                                                                                                                                                other sequences; artificial sequences.
                                                                                                                                                                                                               AX057044.1 GI:12309885
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  organism="synthetic construct"
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                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="unknown"
/mol_type="genomic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="unknown"
/mol_type="genomic
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Pred. No.
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TITLE
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VERSION
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HPU14512
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                                                                                ORIGIN
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Best Local S
Matches 28
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JOURNAL
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Best Local Similarity
Matches 28; Conserv
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                                                                                                                                          variation
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                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence variation Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to Haegert, D.G., G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human papillomavirus
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                                              Similarity
GACATTATTGTTATAGTTTGTATGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                            (bases 1 to 271)
                                  100.0%;
larity 100.0%;
Conservative (
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ilarity 100.0%;
Conservative (
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<1. .>271
                                                                                          replace="t"
                                                                                                                                                                                                                       gene="E6"
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                                  0,
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Direct Submission
Submitted (07-SEP-1994) Dante F. Galutira, Memorial University
Newfoundland, Discipline of Pathology, Fac. Medicine, St. John',
Newfoundland, AlB 3V6, Canada
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Human papillomavirus clone HPV1603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Viruses; dsDNA viruses, no RNA stage; Papillomaviridae; unclassified Papillomaviridae.
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                                                                                                               /gene="E6"
/note="T to G transversion from PA16, GenBank /note="T to G transversion from PA16, GenBank Number K02718, position 310; NCBI gi: 333031"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Human papillomavirus"
/mol_type="genomic DNA"
/strain="HPV16"
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sequence peptidique correspondante"
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                                                                                                                                                                                                                                                                                                                                                                                                               tissue_type="cervical tissue from invasive carcinoma"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         translation="MSEYRHYCYSLYGTTLEQQYNKPLCDLLI"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              note="unnamed protein product"
                                                                                                                                                                                                                                                                                                                                                                                                                                                              db_xref="taxon:10566"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Galutira,D.F. and Younghusband,B.H. ation in the E6 gene of human papillomavirus
Score 28; DB 10;
Pred. No. 0.035;
; Mismatches 0;
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Pred. No. 0.045;
; Mismatches
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                                          Length 271;
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ein (E6)
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Jene, partial
    0;
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108 GACATTATTGTTATAGTTTGTATGGAAC 135

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HPU14513
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Best Local Similarity
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Human papillomavirus type 16
Human papillomavirus type 16
Viruses; dsDNA viruses, no RNA
Alphapapillomavirus.
1 (bases 1 to 370)
Watts, K.J., Thompson, C.H., Cos
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                                                                                                                                                                                                                                                                      28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (07-SEP-1994) Dante F. Galutira, Memorial University Newfoundland, Discipline of Pathology, Fac. Medicine, St. John Newfoundland, AlB 3V6, Canada
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 (bases 1 to 272)
Haegert, D.G., Galutira, D.F. and Younghusband, B.H.
Sequence variation in the E6 gene of human papillomavirus type 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Viruses; dsDNA viruses, no RNA unclassified Papillomaviridae.
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                                                                                                         AP404692 370 bp DNA linear
Human papillomavirus type 16 isolate HPV16E6CC1 E6
E7 protein (E7) genes, partial cds.
AP404692
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                                                                                             AF404692.1 GI:15529569
                                                                                                                                                                                                                   GACATTATTGTTATAGTTTGTATGGAAC 135
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                                                                                                                                                                                                                                                                     100.0%;
llarity 100.0%;
Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                   /codon_start=2
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Number K02718, position 256; NCBI gi: 333031"
/replace="C"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /gene="E6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /gene="E6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mol_type="genomic
/strain="HPV16"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Human papillomavirus"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                            gene="B6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        tissue_type="cervical tissue from invasive carcinoma"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .one="HPV1607"
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                                                                                                                                                                                                                                                                                 Score 28; DB 10
Pred. No. 0.035;
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HPV1607
    Cossart, Y.E.
                                         RNA stage;
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protein (E6)
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                                         Papillomaviridae;
                                                                                                                                                                                                                                                                        0
    and
                                                                                                                                                                                                                                                                                              Length 272;
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gene, partial
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protein (E6) and
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Best Local
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2 (bases 1 to 370)
2 (bases 1 to 370)
3 (bases 1 to 370)
4 (bases 1 to 370)
5 (bases 1 to 370)
6 (bases 1 to 370)
7 (bases 1 to 370)
8 (bases 1 to 370)
8 (bases 2006)

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Camperdown, Sydney, New South Wales 2006,
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421 bp orf E6 [human papillomavirus HPV, Genomic, 421 nt].
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence variation and physical state of human papillomavirus type 16 cervical cancer isolates from Australia and New Caledonia Int. J. Cancer 97 (6), 868-874 (2002)
                                                                                                                                                                                             GenBank staff at the National Library of Medicine created this entry [NCBI gibbsq 120826] from the original journal article. PCR primer sequences: 1-21 and 400-421.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11857370
                                                                                                                                                                                                                                                                                                                                                                                                                                        1 (bases 1 to 421)
Tyan,Y.S., Liu,S.T., Ong,W.R., Chen,M.L.,
Detection of Epstein-Barr virus and human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human papillomavirus
                                                                                                                                                                                                                                                                                                                                                         J. Clin. Microbiol. 31 (1), 53-56 (1993)
                                                                                                                                                                                                                                                                                                                                                                                                           and neck tumors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Viruses;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S51110.1
                                                                                                                                                                                                                                                                                                                             8380183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           unclassified Papillomaviridae.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACATTATTGTTATAGTTTTGTATGGAAC 28
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|larity 100.0%;
|Conservative (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    dsDNA viruses, no RNA stage; Papillomaviridae;
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/gene="E7"
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/translation="DLCIVYRDGNPYAVCDKCLKFYSKISEYRHYCYSLYGTTLEQQF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GI:262061
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Human papillomavirus type 16"
/mol type="genomic DNA"
/isolate="HPV16E6CC1"
/organism="Human papillomavirus"
/mol_type="genomic DNA"
/db_xref="taxon:10566"
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Pred. No. 0.033;
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type 16,
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                                                                                                              ORIGIN
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source
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
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                                                        Matches
                                                                                  Query Match
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 169
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                                                        28;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 (bases 1 to 451)
Watts, K.J., Thompson, C.H., Cossart, Y.E. and Rose, B.R.
Sequence variation and physical state of human papillomavirus type
16 cervical cancer isolates from Australia and New Caledonia
Int. J. Cancer 97 (6), 868-874 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Submitted (31-JUL-2001) Department of Infectious Diseases,
University of Sydney, Blackburn Building, DO6, Off Western
Camperdown, Sydney, New South Wales 2006, Australia
Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Watts, K.J., Thomps
Direct Submission
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Human papillomavirus type 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Viruses; dsDNA viruses, no RNA stage; Papillomaviridae; Alphapapillomavirus.
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                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11857370
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              GACATTATTGTTATAGTTTGTATGGAAC 28
GACATTATTGTTATAGTTTGTATGGAAC 196
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                                                     100.0%;
Conservative 0
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ilarity 100.0%;
Conservative 0
                                                                                                                                                                                                                                                 /translation="TIHDIILECVYCKQQLLRREVYGFAFRDLCIVYRDGNPYAVCDK
CLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLDKKQ
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                                                                                                                                                                                                             /gene="E7"
398. .>451
                                                                                                                                                                                                                                                                                                                                                /gene="E6"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note="type:
                                                                                                                                                                                                                                                                                                                                    codon_start=3
                                                                                                                                                                                                                                                                                                                                                                                                     db_xref="taxon:333760"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /gene="orf
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Thompson, C.H., Cossart, Y.B. and Rose, B.R.
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                                                     Score 28; DB 10;
Pred. No. 0.032;
; Mismatches 0;
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                                                                                Length 451;
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              KEYWORDS
SOURCE
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VERSION
                                                                                                          RESULT 13
HPU34111
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ORGANISM
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AF404703
                                                                              DEFINITION
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                                                                                                                                                                                                                       Matches
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 ORGANISM
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Local Similarity
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U34111
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Human papillomavirus
Human papillomavirus
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456 bp DNA linear VRL 08-MAR-1996
Human papillomavirus type 16, isolate NM T455, early transforming
protein E6 (E6) gene, complete cds.
                                                                                                                                                                                                                                                                                                                         1 GACATTATTGTTATAGTTTGTATGGAAC 28
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Submitted (31-JUL-2001) Department of Infectious Diseases, University of Sydney, Blackburn Building, D06, Off Western Camperdown, Sydney, New South Wales 2006, Australia Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Watts,K.J., Thompson,C.H., Cossart,Y.E. and Rose,B.R. Sequence variation and physical state of human papillomavirus type 16 cervical cancer isolates from Australia and New Caledonia Int. J. Cancer 97 (6), 868-874 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human papillomavirus type 16
Human papillomavirus type 16
Viruses, dsDNA viruses, no Ri
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AF404703
451 bp DNA linear VRL 09-OCT-2
Human papillomavirus type 16 isolate HPV16E6CC12 E6 protein (E6)
and E7 protein (E7) genes, partial cds.
                                                                         U34111.1 GI:1098727
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                                                                                                                                                                                                                                                                                                                                                                                      100.0%; |
|llarity 100.0%; |
|Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /Godon_start=3
/product="E6 protein"
/protein id="AAL01363.1"
/protein id="AAL01363.1"
/db xref="GI:15529603"
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/translation="THNIILECVYCKQCLRREVYDPAFRDLCIVYRDGNPYAVCDK
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /Godon_start=1
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/protein_id="AAL01364.1"
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/mol_type="genomic DNA"
/isolate="HPV16E6CC12"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gene="E6"
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Pred. No. 0.032;
; Mismatches
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Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los
Alamos, NM 87501, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3. Virol. 69 (12),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human papiliomavirus type 16 variant lineages in United States populations characterized by nucleotide sequence analysis of th B6, L2, and L1 coding segments
J. Vicol. 69 (12), 7743-7753 (1995)
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                                                                                                                                                                                                                                                                                                                                                                                            456 bp DNA linear VRL 08-MAR-19:
Human papillomavirus type 16, isolate OR 2087, early transforming
protein E6 (B6) gene, complete cds.
U34115
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Yamada,T., Wheeler,C.M., Halpern,A.L.,
Submitted (16-AUG-1995) Andrew D. Farmer, Los Alamos National Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los Alamos, NM 87501, USA Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Farmer, A.D.
Direct Submission
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                                                                                                                                                   Human papiliomavirus type 16 variant lineages in United States populations characterized by nucleotide sequence analysis of the B6, L2, and L1 coding segments J. Virol. 69 (12), 7743-7753 (1995)
                                                                                                                                                                                                                                          unclassified Papillomaviridae.
1 (bases 1 to 456)
Yamada,T., Wheeler,C.M., Halpern,A.L., Stewart,A.C., Hildesheim,A.
                                                                                                                                                                                                                                                                                                   Human papillomavirus
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
                                                                                                                                                                                                                           and Jenison, S.A.
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                                                                           Direct Submission
                                                                                           Farmer, A.D.
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FAFRDLCIVYRDGNPYAVCDKCLKFYSKISEYRHYCYSLYGTTLBQQYNKPLCDLLIR
CINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
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/protein_id="AAA91658.1"
/db_xref="GI:1098728"
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Mexico, New Mexico, United States.
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isolate="NM T455"
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Pred. No. 0.032;
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HPU34120
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Human papillomavirus type 16, isolate OR 4716, early transforming
protein E6 (E6) gene, complete cds.
U14120
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                                                                                                                                                                                                                                                                                                                              Submitted (16-AUG-1995) Andrew D. Laboratory, HIV Sequence Database, Alamos, NM 87501, USA
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Human papillomavirus type 16 variant lineages in United States
populations characterized by nucleotide sequence analysis of th
E6, L2, and L1 coding segments
J. Vicol. 69 (12), 7743-7753 (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human papillomavirus
Human papillomavirus
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 (bases 1 to 456)
Yamada,T., Wheeler,C.M., Halpern,A.L.,
                                                                                                                                                                                                                                                                                                                                                                                    Direct Submission
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ilarity 100.0%;
Conservative 0
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FAFRDLCIVYRDGNPYAVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIR
CINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note="collected by cervical lavage at Kaiser Permanente, Portland, Oregon, United States."
/codon_start=1
/rodon_start=1
/product="early transforming protein E6"
/protein_id="AA91667.1"
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/translation="MFQDPQERPRKLPQLCTELQTTIHEIILECVYCKQQLLRREVYD
/translation="MFQDPQERPRKLPQLCTELQTTHEIILECVYCKQLLRREVYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /codon_start=1
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/protein_id="AAA91662.1"
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/db_xref="GI:1098736"
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|mol_type="genomic DNA"
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                                                                                                                                                                                    Portland,
                                                                                                                                                                                                                                        /organism="Human papillomavirus"
/mol type="genomic DNA"
/isolate="OR 4716"
                                                                                                                                                                                                                                                                                                             ocation/Qualifiers
                                                                                                             'gene="E6"
                                                                                                                                               'gene="E6"
                                                                                                                                                                                        note="collected by cervical lavage at Kaiser Permanente, brtland, Oregon, United States."
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Pred. No. 0.
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ase, T-10, Mail
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U34121.1
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HPU34123
456 bp
Human papillomavirus type 16, isola
protein E6 (E6) gene, complete cds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      and Jenison, S.A.

Human papillomavirus type 16 variant lineages in United States populations characterized by nucleotide sequence analysis of the E6, L2, and L1 coding segments

J. Vicol. 69 (12), 7743-7753 (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    456
Human papillomavirus type 16,
protein E6 (F6) ~~~
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Laboratory, HIV Sequence Alamos, NM 87501, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Submitted (16-AUG-1995) Andrew D. Farmer, Los Alamos National
Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los
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Yamada,T., Wheeler,C.M., Halpern,A.L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Viruses;
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Human papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Farmer, A.D.
                                                                                                                                                                                           Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Viruses, dsDNA viruses, no RNA stage; unclassified Papillomaviridae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                GACATTATTGTTATAGTTTGTATGGAAC 257
                                                                                                                                         GACATTATTGTTATAGTTTGTATGGAAC 28
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                                                                                                                                                                            Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  E6 (E6) gene,
                                                                                                                                                                                                                                                                  /Godon_start=1
/product="early transforming protein E6"
/protein_id="AAA91668.1"
/protein_id="AAA91668.1"
/db_xref="01:1098748"
/translation="MFQDPQERPRKLPQLCTELQTTIHDILLECVYCKQQLLRREVYDFAFRDLCIVYRDGNPYAVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                                                                                                                                                                                                                      CINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                                                                                                                                                                                                                                                                                                                                                                                                 /no\overline{t}e="collected by cervical lavage at Kaiser Permanente, Portland, Oregon, United States."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="genomic DNA"
/isolate="OR 4724"
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                                                                                                                                                                                                                                                                                                                                                                    gene="E6"
                                                                                                                                                                                                                                                                                                                                                                                                   'gene="E6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 organism="Human papillomavirus"
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Pred. No. 0.0
0; Mismatches
                                                                                                                                                                                       Score 28;
Pred. No. (
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6, isolate
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0.032;
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      DNA
late OR 5110,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
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                                                                                                                                                                                                        Length 456;
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                                  linear
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                   early
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                  VRL 08-MAR-1996
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y transforming
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SOURCE
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VERSION
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HPU34124
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Best Local
      AUTHORS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gene
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                                                                                                                     Human papillomavirus
Human papillomavirus
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
unclassified Papillomaviridae.
1 (bases 1 to 456)
Yamada,T., Mheeler,C.M., Halpern,A.L., Stewart,A.C., Hi
                                                                                                                                                                                                                                                          Human papillomavirus type 16, isolate OR 5428, protein E6 (E6) gene, complete cds.
                                              and Jenison, S.A.

Human papillomavirus type 16 variant lineages in populations characterized by nucleotide sequence E6, L2, and L1 coding segments

J. Virol. 69 (12), 7743-7753 (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                   28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Submitted (16-AUG-1995) Andrew D. Farmer, Los Alamos National
Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los
Alamos, NM 87501, USA
    Farmer, A.D.
                                                                                                                                                                                                                                         U34124.1 GI:1098753
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J. virol. 69 (12), 7743-7753 (1995)
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Yamada,T., Wheeler,C.M., Halpern,A.L.,
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                  (bases 1 to 456)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /gene="E6"
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/codon_start=1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /db xref="taxon:10566"
/db xref="taxon:10566"
/note="collected by cervical lavage
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isolate="OR 5110"
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Pred. No. 0.0
0; Mismatches
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0.032;
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456 bp DNA linear VRL 08-MAR-19:
Human papillomavirus type 16, isolate OR 6170, early transforming
protein E6 (E6) gene, complete cds.
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Location/Qualifiers
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Submitted (16-AUG-1995) Andrew
                                                                                                                                                                                                                                   Submitted (16-AUG-1995) Andrew D. Farmer, Los
Laboratory, HIV Sequence Database, T-10, Mail
Alamos, NM 87501, USA
                                                                                                                                                                                                                                                                                                                                                        Human papillomavirus type 16 variant lineages in United States populations characterized by nucleotide sequence analysis of th E6, L2, and L1 coding segments

J. Vicol. 69 (12), 7743-7753 (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 (bases 1 to 456)
Yamada, T., Wheeler, C.M., Halpern, A.L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human papillomavirus
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
unclassified Papillomaviridae.
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llarity 100.0%;
Conservative 0
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CINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /codon_start=1
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/db_xref="GI:1098754"
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                                                                                           Portland, Oregon,
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isolate="OR 5428"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            organism="Human papillomavirus"
/gene="E6"
/codon_start=1
                                                      /gene="E6"
                                                                                       /note="collected by cervical lavage Portland, Oregon, United States."
                                                                                                                                                              organism="Human papillomavirus"
/mol_type="genomic DNA"
                                                                                                                                                                                                                    location/Qualifiers
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                                                                                                                                               'isolate="OR 6170"
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Pred. No. 0.032;
; Mismatches 0;
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ase, T-10, Mail
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Stop K710, Los
                                                                                                             at Kaiser Permanente,
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Stop K710, Los
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230
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted (16-AUG-1995) Andrew D. Farmer, Los Alamos National
Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los
Alamos, NM 87501, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and Jenison, S.A.
Human papillomavirus type 16 variant lineages in United States
populations characterized by nucleotide sequence analysis of the
E6, L2, and L1 coding segments
J. Vicol. 69 (12), 7743-7753 (1995)
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Human papillomavirus
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
unclassified Papillomaviridae.
1 (bases 1 to 456)
Yamada, T., Wheeler, C.M., Halpern, A.L., Stewart, A.C., Hi
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                                  Farmer, A.D.
Direct Submission
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GACATTATTGTTATAGTTTGTATGGAAC 257
                     GACATTATTGTTATAGTTTGTATGGAAC 28
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/protein_id="AAA91673.1"
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FAFRDLCIVYRDGNPYAVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIR
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/product="early transforming protein E6"
/protein_id="AAA91676.1"
/db_xref="GI:1098764"
                                                                                                                                                                                                                                                                                                                                                                    Portland, Oregon,
                                                                                                                                                                                                                                                                                                                                                                      /db xref="taxon:10566"
/note="collected by cervical lavage at Kaiser Permanente,
Portland, Oregon, United States."
                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Human papillomavirus"
/mol_type="genomic DNA"
/isolate="OR 7574"
                                                                                                                                                                                                                                                                                                                                 gene="E6"
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Pred. No. 0.032;
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AR577459
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AF003016
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                                          source
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                                                                                             1 (bases 1 to 477)
Choppin,J., Villada,I.B., Guillet,J.-G., Conn Polyepitopic proteinic fragments of the E6 an production and use thereof in vaccines Patent: US 6783763-A 1 31-AUG-2004;
Peptide Immune Ligands and Institut National
                                                                                                                                                                                                                                                        AR577459 , sequence 1 from patent US AR577459
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Submitted (06-MAY-1997) Viral Oncology, 1
Cappella Cangiani, Naples I-80131, Italy
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tornesello,M.L., Buonaguro,F.M., Meglio,A., Buonaguro,L., Beth-Giraldo,E. and Giraldo,G. Sequence variations and viral genomic state of human papillomavirus type 16 in penile carcinomas from Ugandan patients type 16 in penile carcinomas from Ugandan patients J.Gen. Virol. 78 (Pt 9), 2199-2208 (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human papillomavirus type 16
Human papillomavirus type 16
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human papillomavirus type AF003016
                                                                                                                                                                                   Unknown.
Unclassified.
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1 (sites)
                                                                                                                                                                                                                 Unknown.
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                                                                                  Recherche Medicale (INSERM); Labege, Cedex;
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                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /codon_start=1
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FAFRDLCIVYDDGNPYAVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIR
CINGQKPLCPDEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                      Location/Qualifiers
         /organism="unknown"
/mol_type="genomic |
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'mol_type="genomic DNA"
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'db_xref="taxon:333760"
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E6 and E7 P
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AX766063
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Local Similarity
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Sequence 7 1
AX766063
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Human papillomavirus type 16
Viruses; dsDNA viruses, no RV
Alphapapillomavirus.
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Sequence 1 f
AX057038
AX057038.1
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Human papillomavirus
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
unclassified Papillomaviridae.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Patent: WO 0075336-A 1 14-DEC-2000;
Biovector Therapeutics S.A. (FR);
de la Recherche Medicale (INSERM) (
                                                     Silencing of gene expression
Patent: WO 03008573-A 7 30-JAN-2003;
Milner, Anne Josephine (GB)
                                                                                                                   Milner, A.J.
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                      Location/Qualifiers
1. .477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /codon_start=1
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/organism="Human papillomavirus type 16"
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Pred. No. 0.031;
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Best Local Similarity
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2 (bases 1 to 477)

2 (bases 1 to 477)

Chan, P.K.S., Lam, C.W., Cheung, T.H., Li, W.W.H., Lo, K.W.K., Chan, M.Y.M., Cheung, J.L.K., Xu, L.Y. and Cheng, A.F.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Submitted (22-FEB-2002) Department of Microbiology, The Chinese University of Hong Kong, Prince of Wales Hospital, Shatin, N.T., Hong Kong SAR, China
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28;
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             GACATTATTGTTATAGTTTGTATGGAAC 278
                            GACATTATTGTTATAGTTTTGTATGGAAC 28
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llarity 100.0%;
Conservative (
                                                                    Conservative
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                                                                                                                                                                                                                                                                                                                            /note="isolated from a patient carcinoma of the cervix"
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p53-binding"
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/db_xref="taxon:333760"
                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Human papillomavirus
/mol_type="genomic DNA"
/strain="As-P"
                                                                                                                                        /trānslation="MHQKRTAMFQDPQERPRKLPQLCTELQTTIHEIILECVYCKQQL
LRREVYDFAFRDLCIVYRDGNPYAVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKP
LCDLLIRCINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                /product="E6 protein"
/protein_id="AAL96604.1"
/db_xref="GI:19744648"
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                                                                                                                                                                                                                                                                                                                                                         country="China"
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RESULT 26

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Query Match
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J. Infect. Dis. 186 (5), 696-700 (2002)

(bases 1 to 477)

Chan, P.K.S., Lam, C.W., Cheung, T.H., Li, W.W.H., Lo, K.W.K., Chan, P.K.S., Lam, C.W., Cheung, J.L.K., Xu, L.Y. and Cheng, A.F.

Direct Submission

Submitted (22-FEB-2002) Department of Microbiology, The Chinese University of Hong Kong, Prince of Wales Hospital, Shatin, N.T., Hong Kong SAR, China
                                                         Human papillomavirus type 16
Human papillomavirus type 16
Viruses, dsDNA viruses, no RN
Alphapapillomavirus.
                                                                                                                                                                                                               AP486301 477 bp I Human papillomavirus type 16 strain protein (E6) gene, complete cds.
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Human papillomavirus type 16
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
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Chan, P.K.S., Lam, C.W., Cheung, T.H., Chan, M.Y.M., Cheung, J.L.K., Xu, L.Y.
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                                          (bases 1 to 477)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /trānslation="MHQKRTAMFQDPQBRPRKLPQLCTELQTTIHEIILECVYCKQQL
LRREVYDFAFRDLCIVYRDGNPYAVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               p53-binding
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carcinoma of the cervix"
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/mol_type="genomic DNA"
/strain="As-P"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LCDLLIRCINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL'
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/db_xref="GI:19744650"
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country="China"
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strain As-P isolate PWH-Q59 E6 protein
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      Li, W.W.H., Lo, K.W.K., and Cheng, A.F.
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                                                                Submitted (22-FEB-2002) Department University of Hong Kong, Prince of Hong Kong SAR, China
                                                                                                                  J. Infect. Dis. 186 (5), 696-700 (2002)
2 (bases 1 to 477)
Chan, P.K.S., Lam, C.W., Cheung, T.H., Li, W.W.H., Lo, K.W.K., Chan, M.Y.M., Cheung, J.L.K., Xu, L.Y. and Cheng, A.F.
                                                                                                                                                                          Chan, P.K.S., Lam, C.W., Cheung, T.H., Li, W.W.H., Lo, K.W.K., Chan, M.Y.M., Cheung, J.L.K., Xu, L.Y. and Cheng, A.F.
Human papillomavirus type 16 intratypic variant infection for cervical neoplasia in Southern China
J. Infect. Dis. 186 (5), 696-700 (2002)
                                                                                                                                                                                                                                                                                       Human papillomavirus type 16
Human papillomavirus type 16
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
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                                                                                                                                                                                                                                                                             Alphapapillomavirus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /codon_start=1
/product="E6 protein"
/protein_id="AAL96606.1"
/protein_id="AAL96606.1"
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/translation="MHQKRTAMFQDPQERPRKLPQLCTELQTTIHEIILECVYCKQQL
/translation="MHQKRTAMFQDPQERPRKLPQLCTELQTTHEIILECVYCKQQL
/translation="MHQKRTAMFQDPQERPKLPQLCTELQTTHEIILECVYCKQQL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note="oncoprotein; transforming; trans-activating;
p53-binding"
                                   1. .477
/organism="Human papillomavirus
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note="isolated from a patient with intraepithelial neoplasia grade II"
                                               Socation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LCDLLIRCINCQKPLCPBEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
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/country="China"
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Pred. No. 0.
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strain As-P isolate PWH-Q81 E6 protein
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J.031;
                                                                              of Microbiology,
Wales Hospital,
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Shatin, N.T.,
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1. .477
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1. .477
/codon_start=1
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                                                                                                                                             /db_xref="taxon:333760"
/country="China"
/note="isolated from a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            p53-binding
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/country="China"
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                                                                                                                                                                                           isolate="QEH-173"
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Chan, P.K.S., Lam, C.W., Cheung, T.H., Li, W.W.H., Lo, K.W.K., Chan, M.Y.M., Cheung, J.L.K., Xu, L.Y. and Cheng, A.F. Human papillomavirus type 16 intratypic variant infection for cervical neoplasia in Southern China J. Infect. Dis. 186 (5), 696-700 (2002)
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Human papillomavirus type 16
Viruses, dsDNA viruses, no RNA stage; Papillomaviridae;
Alphapapillomavirus.
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|mol_type="genomic DNA"
|strain="As-C131"
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Pred. No. 0.0
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transforming; trans-activating;
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Human papillomavirus type 16 intratypic variant infection
for cervical neoplasia in Southern China
J. Infect. Dis. 186 (5), 696-700 (2002)
2 (bases 1 to 477)
Chan, P. K.S., Lam, C.W., Cheung, T.H., Li, W.W.H., Lo, K.W.K.,
Chan, M.Y.M., Cheung, J.L.K., Xu, L.Y. and Cheng, A.F.
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AP4RG704
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Human papillomavirus type 16
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Direct Submission
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                      GACATTATTGTTATAGTTTTGTATGGAAC 28
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ilarity 100.0%;
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Conservative 0
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/db_xref="GI:19744656"
/db_xref="GI:19744656"
/translation="MHOKRYTAMPODPOERPTKLPQLCTELQTTIHEIILECVYCKQQL
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LREVVDFAFROLCIVRDGNPYAVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKP
LCDLLIRCINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                                                                                                                                      /note="isolated from a patient with invasive squamous carcinoma of the cervix"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Human papillomavirus
/mol_type="genomic DNA"
/strain="As-C442"
                                                                                                                                                                                                                                                                                      p53-binding"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                             "CDLLIRCINCQKPLCPDEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
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                                                                                                                                                                                                                                                                                                       note="oncoprotein; transforming; trans-activating;
                                                                                                                                                                                                                                                                                                                        /gene="E6"
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                                                                                                                                                                                                                                                                                                                                                                                                                                  country="China"
                                                                                                                                                                                                                                                                                                                                                                                                                                                 db_xref="taxon:333760"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                solate="PWH-Q73"
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Pred. No. 0.031;
; Mismatches 0;
                                                                                    Score 28; DB 10
Pred. No. 0.031;
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As-C442 isolate PWH-Q73 E6
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Shatin, N.T.,
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AF486305
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AF486306
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2 (bases 1 to 477)

2 (bases 1 to 477)

Chan, P.K.S., Lam, C.W., Cheung, T.H., Li, W.W.H., Lo, K.W.K., Chan, P.K.S., Lam, C.W., Cheung, J.L.K., Xu, L.Y. and Cheng, A.F. Direct Submission

Submitted (22-FEB-2002) Department of Microbiology, The Chinese University of Hong Kong, Prince of Males Hospital, Shatin, N.T., Hong Kong Sar Chinese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 477 bp DNA linear
Human papillomavirus type 16 strain As-C442 isolate
protein (E6) gene, complete cds.
AP486305
                Human papillomavirus type 16
Human papillomavirus type 16
Viruses; dsDNA viruses, no RU
                                                                                                              477 bp I
Human papillomavirus type 16 strain
protein (E6) gene, complete cds.
AF486306
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Human papillomavirus type 16
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
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1 (bases 1 to 477)
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Alphapapillomavirus.
                                                                                                AF486306.1 GI:19744661
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /product="E6 protein"
/product="E6 protein"
/protein id="AAL96610",
/brotein id="AAL96610",
/db_xref="G1:19744660",
/translation="MHQKRYAMFQDFQERPRKLPQLCTELQTTIHEIILECVYCKQQL/
/translation="MHQKRYAMFQDFQERPRKLPQLCTELQTTHEIILECVYCKQQL/
trrevyDFAFRDLCIVYRDGNPYAVCDKCLKFYSKISEYRHYCYSLYGTTLEGQYNKP
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/mol_type="genomic DNA"
|strain="As-C442"
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Pred. No. 0.0
0; Mismatches
                      no RNA stage;
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                                                                                                                                                           As-C193
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                      Papillomaviridae;
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AF486307
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Chan, P.K. S., Lam, C.W., Cheung, T.H., Li, W.W.H., Lo, K.W.K., Chan, P.K. M., Cheung, J.L.K., Xu, L.Y. and Cheng, A.F.
Chan, M.Y. M., Cheung, J.L.K., Xu, L.Y. and Cheng, A.F.
Human papillomavirus type 16 intratypic variant infection for cervical neoplasia in Southern China
J. Infect. Dis. 186 (5), 696-700 (2002)
2 (bases 1 to 477)
Channa T.H. Li.W.W.H., Lo, K.W.K.,
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                                                                                                               Chan, P. K.S., Lam, C.W., Cheung, T.H., Li, W.W.H., Lo, K.W.K., Chan, P. K.S., Lam, C.W., Cheung, J.L.K., Xu, L.Y. and Cheng, A.F. Chan, M.Y.M., Cheung, J.L.K., Xu, L.Y. and Cheng, A.F. Human papillomavirus type 16 intratypic variant infection for cervical neoplasia in Southern China J. Infect. Dis. 186 (5), 696-700 (2002)
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Submitted (22-FBB-2002) Department of Microbiology, The Chinese
Submitted (27-FBB-2002) Prince of Wales Hospital, Shatin, N.T.
            Submitted (22-FEB-2002) Department of Microbiology, The Chinese University of Hong Kong, Prince of Wales Hospital, Shatin, N.T., Hong Kong SAR, China
                                                                                                                                                                                                                                                                                                                                                      AF486307 477 bp l
Human papillomavirus type 16 strain
protein (E6) gene, complete cds.
                                                                  Direct Submission
                                                                              Chan, P.K.S., Lam, C.W., Cheung, T.H., Chan, M.Y.M., Cheung, J.L.K., Xu, L.Y.
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Human papillomavirus type 16
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
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Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /translation="MHQKRTAMFQDPQERPRKLPQLCTELQTTIHEIILECVYCKQQL
LRREVYDFAFRDLCIVYRDGNPYAVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKP
LCDLLIRCINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note="isolated from a patient with intraepithelial neoplasia grade II"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /product="E6 protein"
/protein_id="AAL96611.1"
/db_xref="GI:19744662"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            note="oncoprotein; transforming; trans-activating;
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/country="China"
/note="isolated from a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        'isolate="QEH-94"
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|mol_type="genomic DNA"
|strain="As-C193"
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Pred. No. 0.
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n As-G137
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                                                                              Li, W.W.H., Lo, K.W.K., and Cheng, A.F.
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QEH-683 E6
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AF486308
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Best Local Similarity
Matches 28; Conserv
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                                SdD
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Human papillomavirus type 16
Viruses, dsDNA viruses, no R
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alphapapillomavirus.
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llarity 100.0%;
Conservative (
                                /gene="E6"
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                                                                             ntraepithelial
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                                                                                                                  db_xref="taxon:333760"
country="China"
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                                                                    . .477
                                                                                                    note="isolated
                                                                                                                                                 isolate="QEH-186"
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Pred. No. 0.0
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                                                                                l from a pat
L neoplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
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Submitted (22-FEB-2002) Department of Microbiology, The Chinese University of Hong Kong, Prince of Wales Hospital, Shatin, N.T., Hong Kong SAR, China
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J. Infect. Dis. 186 (5), 696-700 (2002)

(bases 1 to 477)
Chan, P.K.S., Lam, C.W., Cheung, T.H., Li, W.W.H., Lo, K.W.K., Chan, M.Y.M., Cheung, J.L.K., Xu, L.Y. and Cheng, A.F.
Direct Submission
                                                                                                                                                                                                                                                                               /organism="Human papillomavirus
/mol_type="genomic DNA"
/strain="As-A178"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /product="E6 protein"
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/mol_type="genomic DNA"
/strain="As-G137"
'gene="E6"
note="oncoprotein; transforming; trans-activating;
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                                                                                                                                          patient with
sia grade III"
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As-A178 isolate
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QEH-186 E6
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                                                                              ORIGIN
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Query Match
Best Local S
Matches 28
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Human papillomavirus type 16 strain
protein (86) gene, complete cds.
AF486309
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted (22-FEB-2002) Department of Microbiology, University of Hong Kong, Prince of Wales Hospital, S Hong Kong SAR, China
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chan, P.K.S., Lam, C.W., Cheung, T.H., Li, W.W.H., Lo, Chan, M.Y.M., Cheung, J.L.K., Xu, L.Y. and Cheng, A.F.
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Human papillomavirus type 16
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                  Similarity
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larity 100.0%;
Conservative 0
  Conservative
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                                                                                                                                                                                                                                        /note="oncoprotein; transforming; trans-activating;
p53-binding"
                                                                                                                                                                                                                                                                                                                                                         carcinoma of
                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Human papillomavirus
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/strain="As-A267"
                                                                                                                                                                                                                                                                        /gene="E6"
                                                                                                                                                                                                                                                                                                               /gene="E6"
                                                                                                                                                                                                                                                                                                                                                                                                db_xref="taxon:333760"
country="China"
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                                                                                                                                                                                                                                                                                                                                                                             'note="isolated from a
                                                                                                                                                                                                                                                                                                                                                                                                                                isolate="PWH-Q66"
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100.0%; Score 28;
100.0%; Pred. No.
Live 0; Mismatch
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Pred. No. 0.031;
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  Mismatches
                    0.031;
                                       DB 10;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The Chinese
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PWH-Q66 E6
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AF486310
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AF486311
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Best Local 9
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Human papillomavirus type 16 intratypic variant infection for cervical neoplasia in Southern China
J. Infect. Dis. 186 (5), 696-700 (2002)

Chases 1 to 477)
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Human papillomavirus type 16
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
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AF486310
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                                   Human papillomavirus type (E6) gene, complete cds. AF486311 AF486311.1 GI:19744671
                                                                                                                                                                                                                                                                    28;
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 Human papillomavirus type
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                                                                                                                                                                                                                  GACATTATTGTTATAGTTTGTATGGAAC 28
                                                                                                                                                                                                GACATTATTGTTATAGTTTGTATGGAAC 278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (bases 1 to 477)
                                                                                                                                                                                                                                                                    Conservative
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1. .477
                                                                                                                                                                                                                                                                                                                                                         /codon_start=1
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LCDLLIRCINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note="oncoprotein; transforming; trans-activating;
p53_binding"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /db_xref="taxon:333760"
/country="China"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     'gene="E6"
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|strain="E-P"
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                                                                                                                                                                                                                                                                    Score 28; DB 10;
Pred. No. 0.031;
0; Mismatches 0;
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E-P isolate PWH-Q42 E6 protein
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                                                                                        linear VRL 12-AUG-2002 isolate PWH-Q15 E6 protein
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RESULT 38
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                                                               Chan, P.K.S., Lam, C.W., Cheung, T.H., Li, W.W.H., L
Chan, M.Y.M., Cheung, J.L.K., Xu, L.Y. and Cheng, A.
Human papillomavirus type 16 intratypic variant
for cervical neoplasia in Southern China
J. Infect. Dis. 186 (5), 696-700 (2002)
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Chan, P.K.S., Lam, C.W., Cheung, T.H., Li, W.W.H., Lo, K.W.K., Chan, M.Y.M., Cheung, J.L.K., Xu, L.Y. and Cheng, A.F. Direct Submission
Submitted (22-FEB-2002) Department of Microbiology, The Chinese
                                                                                                                                                                                Human papillomavirus type 16
Human papillomavirus type 16
Viruses; dabNA viruses, no RNA stage; Papillomaviridae;
Alphapapillomavirus.
                                                                                                                                                                                                                                                                  Human papillomavirus type (E6) gene, complete cds. AF486312 AF486312.1 GI:19744673
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2 (bases 1 to 477)
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1 (bases 1 to 477)
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carcinoma of the cervix"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /translation="MHQKRTAMFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQL
LRREVYDFAFRDLCIVYRDGNPYAVCDKCLKFYSKISBYRHYCYSLYGTTLEQQYNKP
LCDLLIRCINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
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/product="E6 protein"
/protein_id="AAL96616.1"
/db_xref="GI:19744672"
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/mol_type="genomic DNA"
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/country="China"
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Hong Kong SAR, China
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   /gene="E6"
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/strain="E-P"
                                                                                                 isolate="QEH-453"
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Chan, P.K.S., Lam, C.W., Cheung, T.H., Li, W.W.H., Lo, K.W.K., Chan, M.Y.M., Cheung, J.L.K., Xu, L.Y. and Cheng, A.F.

Human papillomavirus type 16 intratypic variant infection and risk for cervical neoplasia in Southern China

J. Infect. Dis. 186 (5), 696-700 (2002)

Changer 1 to 477)
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/note="isolated from a patient with cervical
intraepithelial neoplasia grade III"
1. .477
                                                                                                                                                             /organism="Human papillomavirus
/mol type="genomic DNA"
/strain="E-P"
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                                                                             /db_xref="taxon:333760"
/country="China"
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intraepithelial neoplasia grade II"
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/db_xref="taxon:333760"
/country="China"
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/mol_type="genomic DNA"
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7ative 0; Mismatches
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n E-P isolate QEH-453 E6 protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%;
Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GACATTATTGTTATAGTTTGTATGGAAC 278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (bases 1 to 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Kong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              dsDNA viruses, no RNA stage; Papillomaviridae;
                                                                                                                                                                                /note="oncoprotein; transforming; trans-activating;
p53-binding"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /codon_start=1
/product="E6 protein"
/protein_id="AAL96618.1"
/db_xref="GI:19744676"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               p53-binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SAR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LCDLLIRCINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /translation="mhokrtampodpoerprklpolictelottihdiilecvyckool
lrrevydfafrdlcivyrdgnpyavcdkclkfyskisbyrhycyslygttleooynkp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /gene="E6"
/note="oncoprotein; transforming; trans-activating;
                                                                                                                                                                                                                                                                                           carcinoma of the
                                                                                                                                                                                                                                                                                                                                                                                    /organism="Human papillomavirus type 16"
/mol type="genomic DNA"
/strain="E-G276T"
                                                                                                          /codon_start=1
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/protein_id="AAL96620.1"
/db_xref="GI:19744680"
                                                                                                                                                                                                                                                                              1. .477
                                                        LCDLLIRCINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                                       /translation="mhokrtamfodpoerprklpodtctelottihdiilecvyckool
Lrrevydpafrdlcivyrdgspyavcdkclkfyskiseyrhycyslygttleooynkp
                                                                                                                                                                                                                    /gene="E6"
                                                                                                                                                                                                                                        1. .477
                                                                                                                                                                                                                                                        /gene="E6"
                                                                                                                                                                                                                                                                                             note="isolated from a patient with invasive squamous cell parcinoma of the cervix"
                                                                                                                                                                                                                                                                                                                              country="China"
                                                                                                                                                                                                                                                                                                                                                              isolate="QEH-561"
                                                                                                                                                                                                                                                                                                                                                                                                                                             . .477
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                db_xref="taxon:333760"
   100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               China
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 28; DB 10
Pred. No. 0.031;
   Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
   28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 10;
   DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA linear
1 E-G276T isolate
   10;
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 Length 477;
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QEH-561 E6
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JOURNAL REFERENCE
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AUTHORS
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VERSION
KEYWORDS
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AF486316
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                                                                      RESULT 42
AF486317
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                                                                                                                                                문
                                                                                                                                                                                                                                                                                           ORIGIN
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       ACCESSION
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                                                           Spoons
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity 100. Matches 28; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
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                                                                                                                                                                                                                                     Local
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                                                                                                                                                251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chan, P.K.S., Lam, C.W., Cheung, T.H., Li, W.W.H., Lo, K.W.K., Chan, M.Y.M., Cheung, J.L.K., Xu, L.Y. and Cheng, A.F.
Chan, Papillomavirus type 16 intratypic variant infection for cervical neoplasia in Southern China
J. Infect. Dis. 186 (5), 696-700 (2002)
2 (bases 1 to 477)
Chan, P.K.S., Lam, C.W., Cheung, T.H., Li, W.W.H., Lo, K.W.K., Chan, M.Y.M., Cheung, J.L.K., Xu, L.Y. and Cheng, A.F.
Direct Submission
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477 bp DNA linear
Human papillomavirus type 16 strain E-G241T isolate
protein (B6) gene, complete cds.
AF486317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted (22-FBB-2002) Department of Microbiology, The Chinese University of Hong Kong, Prince of Wales Hospital, Shatin, N.T., Hong Kong SAR, China
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human papillomavirus type 16
Human papillomavirus type 16
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human papillomavirus type 16 strain protein (E6) gene grotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alphapapillomavirus.
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                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                      GACATTATTGTTATAGTTTGTATGGAAC 28
                                                                                                                                                  GACATTATTGTTATAGTTTGTATGGAAC 278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (bases 1 to 477
                                                                                                                                                                                                                     100.0%;
ilarity 100.0%;
Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cytology"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /gene="E6"
1. .477
                                                                                                                                                                                                                                                                                                            /codon_start=1
/product="26 protein"
/product="26 protein"
/protein_id="AA196621.1"
/db_xref="GI:19744682"
/translation="MHQKRTAMFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQL/translation="MHQKRTAMFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQL/translation="MHQKRTAMFQDPQERPKLPQLCTELQTTIHDIILECVYCKQQL/translation="MHQKRTAMFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQL/translation="MHQKRTAMFQDPQERPKLPYCYSLYGTTLEQQYNKPLREVYDPAFRDLCTVYCKQRPHDLTRGRWTGRCMSCCRSSRTRRETQL"
                                                                                                                                                                                                                                                                                                                                                                                                                                      p53-binding"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Human papillomavirus
/mol type="genomic DNA"
/strain="E-G449T"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /gene="E6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Jocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             db_xref="taxon:333760"
country="China"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   . .477
                                                                                                                                                                                                                                                                                                                                                                                                                                                       note="oncoprotein; transforming; trans-activating;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               note="isolated from a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               isolate="QEH-1220"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GI:19744681
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                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                       Score 28; DB 10
Pred. No. 0.031;
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                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               patient with normal cervical
                                                                                                                                                                                                                                                          DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       E-G449T isolate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                        Length 477;
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QEH-1220 E6
                                            VRL 12-AUG-2002
QEH-1154 E6
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JOURNAL
REFERENCE
AUTHORS
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AUTHORS
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AF486318
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AUTHORS
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KEYWORDS
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                                                                                                                                                           SOURCE
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ORGANISM
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                                                                                                                                                                                                                                                         DEFINITION
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JOURNAL
                                                               TITLE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                   Local
                                                                                                                                                                                                                                                                                                                                                     251
                                                                                                                                                                                                                                                                                                                                                                                                                    28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Submitted (22-FEB-2002) Department of Microbiology, University of Hong Kong, Prince of Wales Hospital, S Hong Kong SAR, China
                                         Chan, P.K.S., Lam, C.W., Cheung, T.H., Li, W.W.H., Lo, K.W.K., Chan, M.Y.M., Cheung, J.L.K., Xu, L.Y. and Cheng, A.F. Human papillomavirus type 16 intratypic variant infection for cervical neoplasia in Southern China
                                                                                                                                    Human papillomavirus type 16
Human papillomavirus type 16
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
                                                                                                                                                                                                        AF486318.1 GI:19744685
                                                                                                                                                                                                                                                  AF486318 477 bp DNA linear VRL 12-AUG-2002
Human papillomavirus type 16 strain E-C442T isolate QEH-196 E6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chan, P.K.S., Lam, C.W., Cheung, T.H., Li, W.W.H., Lo, K.W.K. Chan, M.Y.M., Cheung, J.L.K., Xu, L.Y. and Cheng, A.F. Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chan, P.K.S., Lam, C.W., Cheung, T.H., Li, W.W.H., Lo, K.W.K., Chan, M.Y.M., Cheung, J.L.K., Xu, L.Y. and Cheng, A.F.
Human papillomavirus type 16 intratypic variant infection for cervical neoplasia in Southern China
J. Infect. Dis. 186 (5), 696-700 (2002)
                                                                                                                                                                                                                                        protein
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                                                                                                                          Alphapapillomavirus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                       GACATTATTGTTATAGTTTGTATGGAAC 28
                                                                                                                                                                                                                                                                                                                                                     GACATTATTGTTATAGTTTGTATGGAAC 278
               Infect. Dis. 186 (bases 1 to 477)
                                                                                                         (bases 1 to 477)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Infect. Dis. 186 (bases 1 to 477)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (bases 1 to 477
                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                        (B6)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    dsDNA viruses,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note="oncoprotein; transforming; trans-activating;
p53-binding"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /codon_start=1
/product="E6 protein"
/protein_id="AAL96622.1"
/db_xref="GI:19744684"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LCDLLIRCINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /translation="MHQKRTAMFQDPQBRPRKLPQLCTELQTTIHDIILECVYCKQQL
LRREVYDFAFRDLCIVYRDGNPYAVCDKCLKFYSKISBYRHYCYSLYGTTLEQQYNKP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /gene="E6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /gene="E6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          note="isolated from a patient with intraepithelial neoplasia grade II"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Human papillomavirus type 16"
/mol_type="genomic DNA"
/strain="E-G241T"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           db_xref="taxon:333760"
country="China"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1solate="QEH-1154"
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 Lam, C.W.,
                                                                                                                                                                                                                                      gene,
                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%;
                              186 (5), 696-700 (2002)
                                                                                                                                                                                                                                     complete
                                                                                                                                                                                                                                                                                                                                                                                                                   0
Cheung, T.H., Li, W.W.H., Lo, K.W.K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 28;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      no RNA stage; Papillomaviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                        cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                   0.031
                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 10;
                                                                                                                                                                                                                                                                   DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 477;
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J. Infect. Dis. 186 (5), 696-700 (2002)
2 (bases 1 to 477)
Chan, P.K.S., Lam, C.W., Cheung, T.H., Li, I Chan, M.Y.M., Cheung, J.L.K., Xu, L.Y. and Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human papillomavirus type 16
Human papillomavirus type 16
Viruses, dsDNA viruses, no RNA stage; Papillomaviridae;
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                                                                                                                                                                                                                                                                                                                                              Chan, P.K.S., Lam, C.W., Cheung, T.H., Li, W.W.H., Lo, K.W.K., Chan, M.Y.M., Cheung, J.L.K., Xu, L.Y. and Cheng, A.F. Human papillomavirus type 16 intratypic variant infection for cervical neoplasia in Southern China
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                                                                                                                                                                                    University of Hong Kong,
Hong Kong SAR, China
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1 (bases 1 to 477)
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                                                                           /organism="Human papillomavirus
/mol_type="genomic DNA"
/strain="E-T360T"
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/mol_type="genomic DNA"
/strain="B-C442T"
                                                                                                                                                            Location/Qualifiers
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/product="E6 protein"
/protein_id="AAL96623.1"
/db_xref="GI:19744686"
                   db_xref="taxon:333760"
country="China"
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JRREVYDPAFRDLCIVYRDGNPYAVCDKCLKPYSKISEYRHYCYSLYGTTLEQQYNKP
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country="China"
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note="isolated from a patient with cervical
                                                        isolate="QEH-352"
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Pred. No. 0.031;
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RESULT 45
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2 (bases 1 to 477)

Chan, P.K.S., Lam, C.W., Cheung, T.H., Li, W.W.H., Lo, K.W.K., Chan, M.Y.M., Cheung, J.L.K., Xu, L.Y. and Cheng, A.F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   477 bp DNA linear VRL 12-8
Human papillomavirus type 16 strain E-G187T isolate QEH-400
protein (B6) gene, complete cds.
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Human papillomavirus type 16
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted (22-FBB-2002) Department of Microbiology, University of Hong Kong, Prince of Wales Hospital,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alphapapillomavirus.
1 (bases 1 to 477)
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                                                                                                                                                                                                                                                                                                                                                                                                                     Kong SAR, China
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1. .477
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                                                                                                                                                                                                                                   /note="isolated from a patient with invasive carcinoma of the cervix"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LCDLLIRCINCQKRLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
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LRREVYDFAFRDLCIVYRDGNPYAVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKD
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/product="E6 protein"
/protein_id="AAL96624.1"
/db_xref="GI:19744688"
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                                                                                                                             /note="oncoprotein; transforming; trans-activating;
p53-binding"
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/trānslation="mhqkrtamfqdpqerprklpqlcTelqTT1HD11LeCVYCKQQL
LRREVYDFAFRDLCIVYRDGNPYAVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKP
LCDLLIRCINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                                                                                                                                                                                                                                                                                              /organism="Human papillomavirus
/mol_type="genomic DNA"
/strain="E-G187T"
                                                   /product="E6 protein"
/protein_id="AAL96625.1"
/db_xref="GI:19744690"
                                                                                                          codon_start=1
                                                                                                                                                                 /gene="E6"
                                                                                                                                                                                                 'gene="E6"
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country="China"
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Pred. No. 0.031;
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ORGANISM
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J. Infect. Dis. 16 (5), 696-700 (2002)
2 (Dases 1 to 477)
2 (Chan, P.K.S., Lam, C.W., Cheung, T.H., Li, W.W.H., Lo, K.W.K., Chan, M.Y.M., Cheung, J.L.K., Xu, L.Y. and Cheng, A.F.
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Human papillomavirus type 16
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
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                                                                                  GACATTATTGTTATAGTTTGTATGGAAC 278
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ilarity 100.0%;
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                                                                                                                                                                                                                                   /codon_start=1
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/product="E6 protein"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                           53-binding'
                                                                                                                                                                                                                                                                                                                                                                                         gene="E6"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          note="isolated from a patient arcinoma of the cervix"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              db_xref="taxon:333760"
country="China"
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                                                                                                                                                                                                                                                                                                                                                                         note="oncoprotein; transforming; trans-activating;
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AF404702
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Human papillomavirus type 16 isolat
and E7 protein (E7) genes, partial
AF404702
AF404702.1 GI:15529599
1 (bases 1 to 488)
Watts, K.J., Thompson, C.H., Cossart, Y.E. and Rose, B.R.
Sequence variation and physical state of human papillomavirus type
16 cervical cancer isolates from Australia and New Caledonia
Int. J. Cancer 97 (6), 868-874 (2002)
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Human papillomavirus type 16 intratypic variant infection and risk for cervical neoplasia in Southern China

J. Infect. Dis. 186 (5), 696-700 (2002)

Chan, P.K.S., Lam, C.W., Cheung, T.H., Li, W.W.H., Lo, K.W.K., Chan, M.Y.M., Cheung, J.L.K., Xu, L.Y. and Cheng, A.F.
                                                                                 Human papillomavirus type 16
Human papillomavirus type 16
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
Alphapapillomavirus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Submitted (22-FEB-2002) Department of Microbiology, University of Hong Kong, Prince of Wales Hospital,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human papillomavirus type 16 strain E-G276G442T isolate QEH-2078 protein (E6) gene, complete cds. AF486323 AF486323.1 GI:19744695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            University of Hong Kong,
Hong Kong SAR, China
                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
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p53-binding"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Human papillomavirus type
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
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country="China"
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Pred. No. 0.031;
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SOURCE
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REFERENCE
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Sequence 11
AR095319
AR095319.1
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Direct Submission
Submitted (31-JUL-2001) Department of Infectious Diseases,
Submitted (31-JUL-2001) Backburn Building, D06, Off Western Avenue,
University of Sydney, Blackburn Building, D06, Off Western Avenue,
Camperdown, Sydney, New South Wales 2006, Australia
                                                          28;
                                                                                                                                                          1 (bases 1 to 519)
Edwards, S. John., Cox, J. Cooper., Webb, E. Ann.
Variants of human papillomavirus antigens
Patent: US 6004557-A 11 21-DEC-1999;
Location/Qualifiers
1. .519
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                                                                                                                                                                                                                                                Unknown.
Unclassified.
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GACATTATTGTTATAGTTTGTATGGAAC
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Conservative (
                                                          Conservative
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Vyrdgnpyavcdkclkpyskiseyrhycyslygtaleqqynkplcdllircincqkpl
CpeekQrhldkkqrfhnirgrwtgrcmsccrssrtretql"
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/db_xref="GI:15529600"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Human papillomavirus type 16"
/mol_type="genomic DNA"
/isolate="HPV16E6CC11"
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Pred. No. 0.031;
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Pred. No.
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DEFINITION
Sequence 13 from patent US 6004557.

ACCESSION
AR095320.1 GI:10023092

KEYWORDS
SOURCE
ORGANISM
Unknown.

ORGANISM
Unclassified.
1 (bases 1 to 519)
AUTHORS
TITLE
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FRATURES
FRATURES

FRATURES

FRATURES

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OURY Match
Best Local Similarity 100.0%; Score 28; DB 2; Length 519;
Best Local Similarity 100.0%; Pred. No. 0.031;
Matches

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1 GACATTATTGTTATAGTTTGTATGGAAC 28
JOB time: 926.046 secs

Search completed: May 24, 2006, 06:52:46
JOB time: 926.046 secs
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Maximum Match 100%
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Perfect score:
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2: gb_patv:
3: gb_ph:
4: gb_pl:
5: gb_ro:
6: gb_ro:
6: gb_ro:
10: gb_w:
11: gb_v:
11: gb_v:
11: gb_n:
13: gb_h:
13: gb_h:
14: gb_h:
15: gb_h:
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Kacian, D. Louis, and McAllister, D. Lisa.
Kacian, D. Louis, and McAllister, D. Lisa.
Method for suppressing inhibition of enzyme-mediated reactions by ionic detergents using high concentration of non-ionic detergent patent: US 5846701-A 7 08-DEC-1998;
Location/Qualifiers
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Gen-Probe Incorporated; San Diego,
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Gen-Probe Incorporated; San Diego, CA
Location/Qualifiers
Patent: US 6583278-A 7 24-JUN-2003; Gen-Probe Incorporated; San Diego,
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Carter, N.M.
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Choppin, J., Villada, I.B., Guillet, J.-G., Connan, F.
Polyepitopic proceinic fragments of the R6 and E7 i
production and use thereof in vaccines
patent: US 6783763-A 7 31-AUG-2004;
Peptide Immune Ligands and Institut National de la
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Gen-Probe Incorporated; San Diego, CA
Location/Qualifiers
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100.0%; ilarity 100.0%; Conservative 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="unknown"
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                                                                               organism="unknown"
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                                                                 mol_type="genomic"
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TITLE
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Sequence 7
AX057044
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  Direct Submission
Submitted (07-SEP-1994) Dante F. Galuti
Newfoundland, Discipline of Pathology,
Newfoundland, AlB 3V6, Canada
Location/Qualifiers
                                                                                                1 (bases 1 to 245)
1 (bases 1 to 245)
Haegert, D.G., Galutira, D.F. and Younghusband, B.
                                                                                                                                                                      Human papillomavirus
Human papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         synthetic construct synthetic construct other sequences; artificial sequences
                                                                                                                                   Viruses; dsDNA viruses, no RNA unclassified Papillomaviridae.
1 (bases 1 to 245)
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                                                                                                                                                                                                                                                      Human papillomavirus
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                                                                    Galutira, D.F.
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de la Recherche Medicale (INSERM) (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Patent: WO 0075336-A 7 14-DEC-2000;
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                                                                               (bases 1 to 245)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="synthetic construct"
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/note="fragment de la sequence peptidique correspondante"
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from Patent W00075336.
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clone HP
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HPV1629
                                                                                                                                                            RNA stage;
                             F. Galutira, Memorial University of
athology, Fac. Medicine, St. John's,
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protein (E6)
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                                                                                                                                                                                                                                                                                                          143
                                                            Human papillomavirus
Viruses; dsDNA viruses; no RNA stage; Papillomaviridae;
unclassified Papillomaviridae.
1 (bases 1 to 253)
1 Haegert,D.G., Galutira,D.F. and Younghusband,B.H.
Carmence variation in the E6 gene of human papillomavirus
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Direct Submission
Submitted (07-SEP-1994)
                                                                                                                                    Human papillomavirus
Human papillomavirus
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                            Galutira, D.F.
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                                      (bases 1 to 253)
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/note="T to A transversion 286; NCBI gi:
                                                                                                                                                                                                                                                                                                                                                                                                                               /note="A to T transversion from PA16, GenBank
Number K02718, position 364; NCBI gi: 333031"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /gene="E6"
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/db_xref="GI:12831650"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note="T to G transversion from PA16, Number K02718, position 350; NCBI gi:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note="C to T transition from Number K02718, position 335; N
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100.0%; Pred. No. 0.0024;
tive 0; Mismatches 0
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Galutira, Memorial University of
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NCBI gi: 333031"
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NCBI gi: 333031"
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Direct Submission Submitted (07-SEP-1994) Dante F. Galutira, Memorial University of Submitted (arcipline of Pathology, Fac. Medicine, St. John's, Newfoundland, Discipline of Pathology, Fac. Medicine, St. John's, Newfoundland, AlB 3V6, Canada
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Viruses; dsDNA virus
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                                                                                                                                                                                                                                                                                                                                                              Galutira, D.F
                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to 271)
Haegert,D.G., Galutira,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         U14512.1 GI:984945
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                                                                                                                                                                                                                                                                                                                                                                                                     Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence variation in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
unclassified Papillomaviridae.
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EQQYNKPLCDLLIRCINCQKPLCPEEKQRHLDKKQRFHNI"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note="T to G transversion from PA16, Number K02718, position 350; NCBI gi: /replace="t"
                                                                                                                tissue_type="cervical tissue from invasive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Human papillomavirus"
/mol_type="genomic DNA"
/strain="HPV16"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
/codon_start=2
/product="E6 protein"
                                                                                                                                                                                                      organism="Human papillomavirus"
|mol_type="genomic DNA"
                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /gene="E6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /clone="HPV1601"
/cell_line="Caski and Siha"
                                       /gene="E6"
                                                                               gene="E6"
                                                                                                                                                                /db_xref="taxon:10566"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gene="E6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     tissue_type="cervical"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     db_xref="taxon:10566"
                                                                                                                                             clone="HPV1603"
                                                                                                                                                                                   strain="HPV16"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gene="E6"
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                                                                                                                                                                                                                                                                                                                                                                                                                                               , D. F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 28; DB 10;
Pred. No. 0.0024;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      271 bp
                                                                                                                                                                                                                                                                                                                                                                                                                          E6 gene of
                                                                                                                                                                                                                                                                                                                                                                                                                          and Younghusband, B.H.
6 gene of human papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA linear
E6 protein (E6)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 253;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GenBank Accession
333031"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gene, partial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VRL 14-SEP-1995
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VERSION
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HPU14513
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                                                                                                          ORIGIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORIGIN
                                             Query Match
Best Local Similarity
Matches 28; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Direct Submission
Submitted (07-SEP-1994) Dante F. Galutira, Memorial University
Newfoundland, Discipline of Pathology, Fac. Medicine, St. John',
Newfoundland, AlB 3V6, Canada
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Inclastic 1272)
1 (Cases 1 to 272)
Haegert, D.G., Galutira, D.F. and Younghusband, B.H.
Haegert, D.G., Galutira, D.F. and Younghusband, B.H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                U14513.1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Galutira, D.F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   unclassified Papillomaviridae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Viruses;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human papillomavirus
Human papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HPU14513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
GAACAGCAATACAACAAACCGTTGTGTG 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAACAGCAATACAACAAACCGTTGTGTG 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (bases 1 to 272)
                                             100.0%; llarity 100.0%; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           papillomavirus
                                                                                                                   /gene="B6"
/note="C to G transversion from PA16, GenBank Accession Number K02718, position 256; NCBI gi: 333031"
/replace="c"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   dsDNA viruses,
                                                                                                                                                                                            /codon_start=2
/product="E6 protein"
/protein_id="AB60567.2"
/protein_id="AB60567.2"
/db_xref="01:12831648"
/translation="VYDFAFRDLWIVYRDGNFYAVCDKCLKFYSKISBYRHYCYSLYG
/TTLEQQYNKFLCDLLIRCINCQKFLCFEEKQRHLDKKQRFHNIRGR"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note="T to G transversion from PA16, GenBank Accession
Number K02718, position 310; NCBI gi: 333031"
/replace="t"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /protein_id="AAB60566.1"
/db_xref="G1:984946"
/tzanslation="YUPPAFROLCIVYRDGNPYAVCDKCLKLYSKISEYRHYCYSLYG
TTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLDKKQRFHNIRGR"
                                                                                                                                                                                                                                                                                                     <1. .>272
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                    /gene="E6"
                                                                                                                                                                                                                                                                                                                 /gene="E6"
                                                                                                                                                                                                                                                                                                                                 tissue type="cervical tissue from invasive carcinoma"
1. .272
                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                clone="HPV1607"
                                                                                                                                                                                                                                                                                                                                                                                            strain="HPV16"
                                                                                                                                                                                                                                                                                                                                                                                                       organism="Human papillomavirus"
mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GI:984947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gene="E6"
                                                                                                                                                                                                                                                                                                                                                                            _xref="taxon:10566"
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                                              0;
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Pred. No. 0.0024;
                                           Score 28; DB 10;
Pred. No. 0.0024;
Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 no RNA stage; Papillomaviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           272 bp
ne HPV1607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                       DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          E6 DNA
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                                              0
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                                              Indels
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                                                                            272;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         271;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VRL 15-FEB-2001
gene, partial
                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                             Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         type 16
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RESULT 13
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AUTHORS
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ORGANISM
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HPU14514
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                                                                                                                                              Query Match
Best Local Similarity
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                                                                                         1 GAACAGCAATACAACCAAACCGTTGTGTG 28
                                                                                                                                  28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Direct Submission
Submitted (07-SEP-1994) Dante F. Galutira, l
Newfoundland, Discipline of Pathology, Fac.
Newfoundland, AlB 3V6, Canada
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        l (Dases 1 to 273)

Haegert,D.G., Galutira,D.F. and Younghusband,B.H.

Servence variation in the E6 gene of human papillomavirus type 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          unclassified Papillomaviridae.
1 (bases 1 to 273)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Viruses;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human papillomavirus
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                                                                        GAACAGCAATACAACAAACCGTTGTGTG
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                                                                                                                                100.0%; Score 28; DB 10; llarity 100.0%; Pred. No. 0.0024; Conservative 0; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       dsDNA viruses,
                                                                                                                                                                                                      /note="C to T transition from
Number K02718, position 335; N
/replace="c"
                                                                                                                                                                                                                                                                                             /note="A to G transition from Number K02718, position 289; N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Human papillomavirus"
/mol_type="genomic DNA"
/strain="HPV16"
                                                                                                                                                                                                                                                                                                                                                                     /note="T to A transversion f:
Number K02718, position 286;
                                                                                                                                                                                                                                                                                                                                                                                                                                          /Codon_start=2
/product="B6 protein"
/product="B6 protein"
/protein_id="Au860568.2"
/db_xref="G1:12831649"
/translation=""YDPAFRDLCIVYRDGNPYAVCDKCLKFYSKISBYRYYCYSLYG
                                                                                                                                                                                                                                                                                                                                                                                                                                  TTLEQQYNKPLCDLLIRCINCQKPLCPBBKQRHLDKKQRFHNIRGR"
                                                                                                                                                                                                                                                                                                                                                                                                   'gene="E6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /gene="B6"
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                                                                                                                                                                                                                                                    'gene="E6"
                                                                                                                                                                                                                                                                                replace="a"
                                                                                                                                                                                                                                                                                                                            gene="E6"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               tissue_type="cervical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 db_xref="taxon:10566"
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clone HPV1627
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RNA stage; Papillomaviridae;
                                                                        170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tissue
                                                                                                                                                                                                                                                                                                                                                                     ı from PA16,
B6; NCBI gi:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A linear
protein (E6)
                                                                                                                                                                                                                       m PA16, GenBank Accession
NCBI gi: 333031"
                                                                                                                                                                                                                                                                                              m PA16, GenBank Accession
NCBI gi: 333031"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   from
                                                                                                                                                            Length
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                                                                                                                                   Indels
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333031"
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gene, partial
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DEFINITION

HPU14516 274 bp Human papillomavirus clone HPV1649

DNA linear E6 protein (E6)

gene,

partial

VRL 14-SEP-1995

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ACCESSION
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SOURCE
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LOCUS
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    ACCESSION
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Best Local S
Matches 28
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                                                                   14
                                                                                                          143
orf E6 [human papillomavirus Genomic, 421 nt].
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U14516
U14516.1
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Human papillomavirus
Viruses, dsDNA viruses,
                                                                                                                                                               28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Submitted (07-SEP-1994) Dante P. Galuti
Newfoundland, Discipline of Pathology,
Newfoundland, Alla 3V6, Canada
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  unclassified Papillomaviridae.

1 (bases 1 to 274)

Haegert D. G., Galutira, D.F. and Younghusband, B.H.

Sequence variation in the 86 gene of human papillomavirus type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Galutira, D.F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unpublished
                                                                                                                                                                           Similarity
                                                                                                                       GAACAGCAATACAACAAACCGTTGTGTG 28
                                                                                                          GAACAGCAATACAACAAACCGTTGTGTG 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (bases 1 to 274)
                                                                                                                                                            100.0%; (larity 100.0%; )
Conservative 0;
                                                                                                                                                                                                                          /gene="E6"
/note="T to G transversion from PA16,
Number K02718, position 350; NCBI gi:
/replace="t"
                                                                                                                                                                                                                                                                                                                                                                           /note="A to G transition from Number K02718, position 289; N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /gene="E6"
/gene="E6"
/codon_start=2
/codon_start=2
/product="R6 protein"
/protein_id="AAB60570.1"
/protein_id="AAB60570.1"
/db_xref="G1:984954"
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/tzanslation="VDFAFROLCIYYRDGNPYAVCDKCLKFYSKISBYRYYCYSVYG
                                                                                                                                                                                                                                                                                                          /note="C to T transition
Number K02718, position 3
                                                                                                                                                                                                                                                                                                                                                                                                                                          /note="T to A |
Number K02718,
                                                                                                                                                                                                                                                                                              /replace="c"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Human papillomavirus"
/mol type="genomic DNA"
/strain="HPV16"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GI:984953
                                                                                                                                                                                                                                                                                                                                    'gene="E6"
                                                                                                                                                                                                                                                                                                                                                              replace="a"
                                                                                                                                                                                                                                                                                                                                                                                                        'gene="E6"
                                                                                                                                                                                                                                                                                                                                                                                                                              replace="t"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             'tissue_type="cervical tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  clone="HPV1649"
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                                                                                                                                                            .0%; Score 28; DI
.0%; Pred. No. 0.0
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                          to A transversion for 02718, position 286;
                                                                                                                                                                                                                                                                                                           position from PA16, GenBank Accession position 335; NCBI gi: 333031"
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dd,
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                          DNA
type
                                                                                                                                                                                        DB 10;
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5; NCBI gi:
                                                                                                                                                                                                                                                                                                                                                                         m PA16, Ge
NCBI gi:
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                           16,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   from invasive
                                                                                                                                                                                     Length 274;
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                             head and
                                         linear
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1: 333031"
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333031"
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                             VRL 08-MAY-1993 neck tumor,
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FEATURES
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AF404695
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Best Local S
Matches 28
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                                                                                                                                                                                                                                                                                                                                                                                                                                                watts,K.J., Thompson,C.H., Cossart,Y.E. and Rose,B.R. Sequence variation and physical state of human papillomavirus 16 cervical cancer isolates from Australia and New Caledonia Int. J. Cancer 97 (6), 868-874 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   451 bp DNA linear
Human papillomavirus type 16 isolate HPV16E6CC4 E6
B7 protein (E7) genes, partial cds.
AF404695
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                                                                                                                                                                                                                                                                                        Submitted (31-JUL-2001) Department of Infectious Diseases,
University of Sydney, Blackburn Building, D06, Off Western Avenue,
Camperdown, Sydney, New South Wales 2006, Australia
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human papillomavirus type 16
Human papillomavirus type 16
Viruses; dsDNA viruses, no RNA stage;
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entry [NCBI gibbeq 120826] from the original journal article.
PCR primer sequences: 1-21 and 400-421.
Location/Qualifiers
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Tyan,Y.S., Liu,S.T., Ong,W.R., Chen,M.L.,
Detection of Epstein-Barr virus and human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Viruses; dsDNA viruses, no RNA stage; Papillomaviridae, unclassified Papillomaviridae.
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                                                                                                                                                                                                                                                                                                                                                                                       Direct Submission
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tts,K.J., Thompson,C.H., Cossart,Y.E. and Rose,B.R.
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/gene="E6"
/codon_start=3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Human papillomavirus"
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                                                                                                                                     /gene="E6"
                                                                                                                                                                               /db_xref="taxon:333760"
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protein (E6) and
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translation="TIHDIILECVYCKQQLLRREVYGFAFRDLCIVYRDGNPYAVCDK"

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AF404696
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Human papillomavirus type 16 isolate HPV16E6CC5 E6
E7 protein (E7) genes, partial cds.
AP404696
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Human papillomavirus type 16
Viruses, dsDNA viruses, no RNA stage; Papillomaviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Submitted (31-JUL-2001) Department of Infectious Diseases,
University of Sydney, Blackburn Building, D06, Off Western
Camperdown, Sydney, New South Wales 2006, Australia
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Watts, K.J., Thompson, C.H., Cossart, Y.E. and Rose, B.R. Sequence variation and physical state of human papillomavirus type 16 cervical cancer isolates from Australia and New Caledonia Int. J. Cancer 97 (6), 868-874 (2002)
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                                                                                                                                                                          /product="E6 protein"
/protein id="AALI01349.1"
/protein id="AALI01349.1"
/db_xref="G1:1559582"
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/translation="T1HNIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPYAVCDK
CLKFYSKISBYRHYCYSVYGTTLEQQYNKPLCDLLIRCINCQKPLCPBEKQRHLDKKQ
RFHNIRGRWTGRCMSCCRSSRTRRETQL"
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RFHNIRGRWTGRCMSCCRSSRTRRETQL"
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                                                                                                                                                                                                                                                                                                                                           gene="B6"
                                                                                                                                                                                                                                                                                                                                                                                                mol_type="genomic DNA"
isolate="HPV16E6CC5"
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                 translation="MHGDTPTLHEYMLDLQPE"
                                                                                                          'gene="E7"
                                                                                                                                                                                                                                                                                        codon_start=3
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Pred. No. 0.0025
; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Submitted (31-JUL-2001) Department of Infectious Diseases, University of Sydney, Blackburn Building, D06, Off Western Camperdown, Sydney, New South Wales 2006, Australia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human papillomavirus type 16
Human papillomavirus type 16
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
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Watts,K.J., Thompson,C.H., Cossart,Y.E. and Rose,B.R.
Sequence variation and physical state of human papillomavirus type
16 cervical cancer isolates from Australia and New Caledonia
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Human papillomavirus type 16 isolate HPV16E6CC8 E6
E7 protein (E7) genes, partial cds.
AF404699
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Watts, K.J., Thompson, C.H., Cossart, Y.E. and Rose, B.R.
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                                                              Similarity 100
28; Conservative
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GAACAGCAATACAACCAAACCGTTGTGTG 231
                               GAACAGCAATACAACAAACCGTTGTGTG
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                                                                                                                                                                                                                                                                                          /gene="E6"
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RESULT 18 AF404700

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AF404701
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Best Local Similarity
Matches 28; Conserv
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                                           Human papillomavirus type 16
Human papillomavirus type 16
Viruses; dsDNA viruses, no RNA
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AF404701
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Human papillomavirus type 16
Virusee; dabNA viruses, no RNA stage; Papillomaviridae;
Alphapapillomavirus.
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Watts, K.J., Thompson
Direct Submission
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451 bp
Human papillomavirus type 16 isolat
E7 protein (E7) genes, partial cds.
Alphapapillomavirus.
i (bases 1 to 451)
Watts, K.J., Thompson
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University of Sydney, Blackburn Building, D06, Off Western Avenue,
Camperdown, Sydney, New South Wales 2006, Australia
Location/Qualifiers
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AF404700.1 GI:15529593
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                                                                                                                                                                                                                                                                                                                     100.0%; Score 28; DE ilarity 100.0%; Pred. No. 0.0 Conservative 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /codon_start=3
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 Thompson, C.H., Cossart, Y.E. and
                                                                                                                GI:15529596
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                                                 stage;
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                                                 Papillomaviridae;
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11857370
                                                                               2 (bases 1 to 451)
Watts, K.J., Thompson, C.H.,
Direct Submission
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Direct Submission
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Pred. No. 0.0025;
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Alphaparana ASI)

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Retts, K.J., Thompson, C.H., Cossart, Y.E. and Rose, B.R.

Watts, K.J., Thompson, C.H., Cossart, Y.E. and Rose, B.R.

Sequence variation and physical state of human papillomavirus type

16 cervical cancer isolates from Australia and New Caledonia

Tnt. J. Cancer 97 (6), 868-874 (2002)
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Human papillomavirus type 16 isolate HPV16E8CC12 E6
and E7 protein (E7) genes, partial cds.
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Human papillomavirus type 16
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
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Submitted (31-JUL-2001) Department of Infectious Diseases, University of Sydney, Blackburn Building, D06, Off Western Camperdown, Sydney, New South Wales 2006, Australia Location/Qualifiers
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AR177943
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AR167393
 Unknown
                                          Sequence 6
AR177943
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Kipps, T.J. and Wu, Y.
Vaccines with enhanced intracellular processing
Patent: US 6287569-A 29 11-SEP-2001;
                                                                                                                                                                                                                                                                                                                               Unknown
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          Unknown
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Similarity 100.0%; Pred. No. 0.0025;
28; Conservative 0; Mismatches 0
                                                                                                                                                                                                                                                                                                                    Inclassified.
                                                                                                                        GAACAGCAATACAACAAACCGTTGTGTG 292
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/translation="TIHNIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPYAVCDK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RFHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                                                                                                                                                                                         /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                     organism="unknown"
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              GAACAGCAATACAACAAACCGTTGTG 28
 GAACAGCAATACAACAAACCGTTGTGTG 292
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Query Match
Best Local Similarity
Matches 28; Conserv
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Direct Submission
Submitted (12-DEC-2000) Department Vinjiang, 14 Shengli Road, Urumqi,
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human papillomavirus type 16
Human papillomavirus type 16
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
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Eckert,R.L. and Crish,J.F.

Tissue specific promoters and transgenic mouse for the screening pharmaceuticals
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Shengwu Huaxue Yu Shengwu Wuli Jinzhan
2 (bases 1 to 456)
Ma, Z. and Zhang, F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cloning and Sequencing of HPV16 E6 gene from Cervical Carcinoma
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1 (bases 1 to 456)
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   Conservative
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CINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
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                                                                                                                                                                                          gene="E6"
codon_start=1
                                                                                                                                                                                                                                              gene="E6"
                                                                                                                                                                                                                                                                                  note="HPV16"
                                                                                                                                                                                                                                                                                                                                                                     organism="Human papillomavirus"
proviral
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0; Mismatches
                  Score 28; DB 10;
Pred. No. 0.0025;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (2001) In
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and Jenison, S.A.

Human papillomavirus type 16 variant lineages in United States populations characterized by nucleotide sequence analysis of the B6, L2, and L1 coding segments
B6, L2, and L1 coding segments
J. Virol. 69 (12), 7743-7753 (1995)
                                                                                                                                             456 bp DNA linear VRL 08-MAR-19:
Human papillomavirus type 16, isolate NM 9999, early transforming
protein E6 (E6) gene, complete cds.
U34108
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Human papillomavirus type 16, isolate NM 4094, early transforming protein E6 (E6) gene, complete cds.
                                                                                                                                                                                                                                                                                Human papillomavirus
Human papillomavirus
Viruses; daSMA viruses, no RNA
unclassified Papillomaviridae.
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             1 (bases 1 to 456)
Yamada,T., Wheeler,C.M., Halpern,A.L.,
                                                                                                                                 U34108.1 GI:1098721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Farmer, A.D.
Direct Submission
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Viruses, dsDNA viruses, no RNA stage; Papillomaviridae; unclassified Papillomaviridae.

1 (bases 1 to 456)
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Jenison, S.A.
                                                                                                                                                                                                                                                                                                                                                   Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mexico,
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/mexico, New Mexico, United States
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                organism="Human papillomavirus"
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Pred. No.
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               Stewart, A.C.,
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               Hildesheim, A.
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HPU34109
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Matches 28
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J. Virol. 69 (12), 7743-7753 (1995)
                                                                                                  Submitted (16-AUG-1995) Andrew D. Laboratory, HIV Sequence Database, Alamos, NM 87501, USA
                                                                                                                                                                                                                                                                                                                                                                           Human papillomavirus
Viruses, dsDNA viruses, no RNA stage,
unclassified Papillomaviridae.
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J. virol. 69 (12), 7743-7753 (1995)
                                                                                                                                                                                                                                                                                                                                        1 (bases 1 to 456)
Yamada, T., Wheeler, C.M., Halpern, A.L., Stewart, A.C., Hildesheim, A.
                                                                                                                                                             Direct Submission
                                                                                                                                                                                                                       7494284
                                                                                                                                                                                                                                                                                                                     and Jenison, S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                        Human papillomavirus
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Mexico, New Mexico, United States."
                                                                           Location/Qualifiers
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100.0%; Pred. No. 0.0025;
tive 0; Mismatches 0
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T-10, Mail Stop K7
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                                                                                                                                                                                                                                                                                                                                  Farmer, A.D.

Farmer, A.D.

Direct Submission

Submitted (16-AUG-1995) Andrew D. F.

Laboratory, HIV Sequence Database,

Laboratory, HIV Sequence Database,

Laboratory, HIV Sequence Database,
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J. Virol. 69 (12),
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Yamada,T., Wheeler,C.M., Halpern,A.L.,
and Jenison,S.A.
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Human papillomavirus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Viruses; dsDNA viruses, no RNA stage; Papillomaviridae; unclassified Papillomaviridae.
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/codon_start=1
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                                                                                                                                                                                                          /noTe="collected by cervical swab at the University of New Mexico, New Mexico, United States."
1. .456
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FAFRDLCIVYRDGNPYAVCDKCLKFYSKISEYRHYCYSVYGTTLEQQYNKPLCDLLIR
CINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
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                                                                                                                                                                                                                                                                      /organism="Human papillomavirus"
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                                                                                                                                                                                             'gene="E6"
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100.0%;
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Pred. No. (
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Score
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 0.0025;
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            DB 10;
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                                                                      456 bp DNA linear VRL 08-MAR-19:
Human papillomavirus type 16, isolate NM T529, early transforming
protein E6 (E6) gene, complete cds.
U34112
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Viruses; dsDNA viruses, no RNA stage;
unclassified Papillomaviridae.
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Human papillomavirus type 16, isolate
protein E6 (E6) gene, complete cds.
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Human papillomavirus
Human papillomavirus
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                                                       U34112.1
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Direct Submission
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Alamos, NM 87501,
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nada, T., Wheeler, C.M., Halpern, A.L.,
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llarity 100.0%;
Conservative 0
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/product="early transforming protein E6"
/protein Id="AAA91658.1"
/db_xref="GI:1098728"
/translation="MYQDPQRERKLPQLCTELQTTIHDIILECVYCKQQLLRREVYD FAFRDLCIYLPGREVYCDKCLKEYSKISBYRHYCYSLYGTTLEQQYNKPLCDLLIR CINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
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/note="collected by cel
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|mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gene="E6"
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87501, USA
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HPU34113
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Matches 28
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                Direct Submission
Submitted (16-AUG-1995) Andrew D. |
Laboratory, HIV Sequence Database,
Alamos, NM 87501, USA
                                                                                                                                         Human papiliomavirus type 16 variant lineages in United States populations characterized by nucleotide sequence analysis of th E6, L2, and L1 coding segments
J. Virol. 69 (12), 7743-7753 (1995)
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Yamada, T., Wheeler, C.M., Halpern, A.L.,
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Human papillomavirus
Viruses; daBNA viruses, no RNA
unclassified Papillomaviridae.
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Human papillomavirus type 16, isolate OR 0198, early
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J. virol. 69 (12), 7743-7753 (1995)
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Yamada, T., Wheeler, C.M., Halpern, A.L.,
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                                                                                     Farmer, A.D.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /gene="86"
/codon_start=1
/codon_start=1
/product="early transforming protein_16"
/protein_id="aAAA91659.1"
/db_xref="GI:1098730"
/td_staftion="MFDDPQERPKLPHLCTELQTTIHDIILECVYCKQQLLRREVYD FAFRDLCIVYRGGNFYAVCDKCLKFYSKISEYRYYCYSVYGTTLEQQYNKFLCDLLIR CINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
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Mexico, New Mexico, United States
Location/Qualifiers
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100.0%; Pred. No. 0.0
tive 0; Mismatches
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                               Farmer, Los Alamos National, T-10, Mail Stop K710, Los
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, T-10, Mail
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Stop K710, Los
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Human papillomavirus type 16, isolate OR 1905, ear
protein E6 (E6) gene, complete cds.
U34114
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Viruses, dsDNA vi
                                                                                                                                                                                                                                                                                                                                                                                   Submitted (16-AUG-1995) Andrew D. Farmer, Los Alamos National Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human papillomavirus type 16 variant lineages in United States populations characterized by nucleotide sequence analysis of the E6, L2, and L1 coding segments
J. Virol. 69 (12), 7743-7753 (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    unclassified Papillomaviridae.

1 (bases 1 to 456)

Yamada, T., Wheeler, C.M., Halpern, A.L.,
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Alamos, NM 87501, USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                             Farmer, A.D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7494284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      and Jenison, S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       dsDNA viruses,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /Codon_start=1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Human papillomavirus"
/mol type="genomic DNA"
/isolate="OR 0198"
                                                                                                                                                                                                Portland, Oregon,
                                                                                                                                                                                                  /db xref="taxon:10566"
/note="collected by cervical lavage at Kaiser Permanente,
Portland, Oregon, United States."
                                                                                                                                                                                                                                                             /organism="Human papillomavirus"
/mol_type="genomic DNA"
/isoTate="OR 1905"
                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GI:1098733
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note="collected by cervical lavage at Kaiser Permanente,
Portland, Oregon, United States."
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                                                                                                                                                           'gene="E6"
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Pred. No. 0.0025;
); Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   no RNA stage; Papillomaviridae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 10;
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RESULT 33
HPU34116
LOCUS
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TITLE
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                   DEFINITION
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Matches
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Best Local (
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Best Local Similarity
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HPU34116 456 bp DN7
Human papillomavirus type 16, isolate
protein E6 (E6) gene, complete cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Submitted (16-AUG-1995) Andrew D. Farmer, Los Alamos National Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human papillomavirus type 16 variant lineages in United States populations characterized by nucleotide sequence analysis of the E6, L2, and L1 coding segments
J. Virol. 69 (12), 7743-7753 (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human papillomavirus
Human papillomavirus
Viruses; dabNA viruses, no RNA
unclassified Papillomaviridae.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       and Jenison, S.A.
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Yamada, T., Wheeler, C.M., Halpern, A.L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    U34115.1 GI:1098735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Laboratory, HIV Sequence
Alamos, NM 87501, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Farmer,A.D.
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                                                                                                                                                                                          Similarity
                                                                                                                                   GAACAGCAATACAACAAACCGTTGTGTG 28
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                                                                                                              GAACAGCAATACAACAAACCGTTGTGTG 292
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ilarity 100.0%;
Conservative 0
                                                                                                                                                                             Conservative
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in E6 (E6) gene,
                                                                                                                                                                                                                                                                   /Codon_start=1
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/protein_id="AAA91662.1"
/protein_id="AAA91662.1"
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                                                                                                                                                                                                                                                                                                                                                                                                                              /db xref="taxon:10566"
/note="collected by cervical lavage at Kaiser Permanente,
portland, Oregon, United States."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                                                                                                                                                                                                                       CINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              organism="Human papillomavirus"
                                                                                                                                                                                                                                                                                                                                                                  gene="B6"
                                                                                                                                                                                                                                                                                                                                                                                                  'gene="E6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mol_type="genomic isolate="OR 2087"
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s type 16, ii
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                                                                                                                                                                         Score 28; DB 10;
Pred. No. 0.0025;
; Mismatches 0
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Pred. No. 0.0025;
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6, isolate
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                                DNA
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                  3136,
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                  early
                                VRL 08-MAR-1996
                transforming
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AUTHORS
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AUTHORS
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VERSION
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HPU34117
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AUTHORS
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Matches
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                                                                                                 TITLE
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                                                                                                                                                                                                                                                                                                                                                                                        265
                                                                                                                                                                                                                                                            456 bp DNA linear
Human papillomavirus type 16, isolate OR 3473, ear
protein E6 (E6) gene, complete cds
U34117
                                                                                                                                                            Human papillomavirus
Human papillomavirus
Viruses; daBNA viruses, no RNA
unclassified Papillomaviridae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Submitted (16-AUG-1995) Andrew D. Laboratory, HIV Sequence Database, Alamos, NM 87501, USA
                                                 Human papillomavirus type 16 variant lin populations characterized by nucleotide E6, L2, and L1 coding segments J. Virol. 69 (12), 7743-7753 (1995)
                                                                                                                                                                                                                                           U34117.1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Farmer, A.D.
Direct Submission
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 (bases 1 to 456)
Yamada, T., Wheeler, C.M., Halpern, A.L.,
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Viruses; dsDNA viruses,
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      Farmer, A.D.
                                                                                                                and Jenison, S.A.
                                                                                                                             1 (bases 1 to 456)
Yamada,T., Wheeler,C.M., Halpern,A.L.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
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                                                                                                                                                                                                                                                                                                                                                                                      GAACAGCAATACAACAAACCGTTGTGTG 292
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                  (bases 1 to 456)
                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%;
ilarity 100.0%;
Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /gene="E6"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /db xref="taxon:10566"
/db cervical lavage
/note="collected by cervical lavage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Portland, Oregon,
                                                                                                                                                                                                                                           GI:1098739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gene="E6"
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Pred.
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                                                                                                 lineages in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10;
                                                                                                                                                                             Papillomaviridae;
                                                                                                                               Stewart, A.C., Hildesheim, A.
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early transforming
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HPU34118
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Human papillomavirus type 16, isola
protein E6 (E6) gene, complete cds.
U34118
                                                                                                                                                                                                                                               Submitted (16-AUG-1995) Andrew D. Laboratory, HIV Sequence Database, Alamos, NM 87501, USA
                                                                                                                                                                                                                                                                                                                                                                 E6, L2, and by con-
J. Virol. 69 (12),
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Submitted (16-AUG-1995) Andrew D. Farmer, Los Alamos National
Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los
Alamos, NM 87501, USA
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Yamada, T., Wheeler, C.M., Halpern, A.L.,
and Jenison, S.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Viruses; dsDNA viruses, no RNA stage; Papillomaviridae; unclassified Papillomaviridae.
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Similarity 100.0%; Pred. No. 0.(
28; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                       (bases 1 to 456)
                                                                                                                                                                                                                                                                                                                                                                           n papillomavirus type 16 variant lineages in United States lations characterized by nucleotide sequence analysis of the L2, and L1 coding segments irol. 69 (12), 7743-7753 (1995)
/gene="E6"
/codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /gene="E6"
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/godom_start=1
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CINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                                                                                                                                          /mol
                                                                                               /noTe="collected by cervical lavage at Portland, Oregon, United States."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note="collected by cervical lavage at Kaiser Permanente,
Portland, Oregon, United States."
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                                                                                                                                                       'isolate="OR 3759"
                                                                                                                                                                        organism="Human papillomavirus"
/mol_type="genomic DNA"
                                                                                                                                                                                                                           ocation/Qualifiers
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|mol_type="genomic DNA"
|isolate="OR 3473"
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, T-10, Mail Stop K710, Los
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265 GAACAGCAATACAACAAACCGTTGTGTG 292
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Human papillomavirus type 16, isolate OR 4541, early transforming
protein E6 (E6) gene, complete cds.
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                     1 GAACAGCAATACAACAAACCGTTGTGTG 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Submitted (16-AUG-1995) Andrew D. Farmer, Los Alamos National Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 GAACAGCAATACAACAAACCGTTGTGTG 28
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Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human papillomavirus type 16 variant lineages in United States populations characterized by nucleotide sequence analysis of the E6, L2, and L1 coding segments
J. Virol. 69 (12), 7743-7753 (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Viruses, dsDNA viruses, no RNA stage, Papillomaviridae,
unclassified Papillomaviridae.
1 (bases 1 to 456)
Yamada,T., Wheeler,C.M., Halpern,A.L., Stewart,A.C., Hildesheim,A.
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Alamos, NM 87501, USA
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                                                                                                                                                               CINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
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m noar \Gamma} = "{
m collected} by cervical lavage at Kaiser Permanente, Portland, Oregon, United States."
                                                                                                                                                                                                                                                                                                                                                                                                                      /mol_type="genomic DNA"
/isolate="OR 4541"
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/mol_type="genomic nwa"
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                                                                    Score 28; DB 10;
Pred. No. 0.0025;
; Mismatches 0
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Pred. No. 0.0025;
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HPU34120
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HPU34121
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and Jenison, S.A.

Human papillomavirus type 16 variant lineages in United States populations characterized by nucleotide sequence analysis of the population of the coding segments E6, L2, and L1 coding segments L2, are L1 coding segments L3. Virol. 69 (12), 7743-7753 (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Submitted (16-AUG-1995) Andrew D. Farmer, Los Alamos National Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los Alamos, NM 87501, USA
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Human papillomavirus
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Human papillomavirus
Viruses; dsNNA viruses, no RNA stage; Papillomaviridae;
unclassified Papillomaviridae.
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1 (bases 1 to 456)
Yamada,T., Wheeler,C.M., Halpern,A.L., Stewart,A.C., Hildesheim,A.
and Jenison, S.A.

Human papillomavirus type 16 variant lineages in United States populations characterized by nucleotide sequence analysis of the
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                                                      1 (bases 1 to 456)
Yamada, T., Wheeler, C.M., Halpern, A.L., Stewart, A.C., Hildesheim, A.
                                                                                                                                                                                             U34121.1 GI:1098747
                                                                                                                                                                                                                               Human papillomavirus type
protein E6 (E6) gene, comp
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                                                                                                                                                                                                                                                                       HPU34121
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                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note="collected by cervical lavage at Kaiser Permanente, Portland, Oregon, United States."
1. .456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /translation="MFQDPQERPRKLPQLCTELQTTIHEIILECVYCKQQLLRREVYD
FAFRDLCIVYRDGNPYAVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIR
CINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /codon_start=1
/product="early transforming protein
protein_id="AAA91667.1"
db_xref="GI:1098746"
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Pred. No. 0.0025;
; Mismatches 0
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                                                                                                                                                                                                                                 complete cds.
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e 16, isolate
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y transforming
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HPU34122
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456 bp DNA linear VRL 08-MAR-19:
Human papillomavirus type 16, isolate OR 4997, early transforming
protein E6 (E6) gene, complete cds.
                                                                                                                   Farmer, A.D.
Direct Submission
Direct Submission
Submitted (16-AUG-1995) Andrew D.
Laboratory, HIV Sequence Database,
Alamos, NM 87501, USA
Location/Qualifiers
                                                                                                                                                                                                                                                        Human papillomavirus type 16 variant lineages in populations characterized by nucleotide sequence E6, L2, and L1 coding segments
J. Virol. 69 (12), 7743-7753 (1995)
                                                                                                                                                                                                                                                                                                                                          unclassified Papillomaviridae.

1 (bases 1 to 456)
Yamada,T., Wheeler,C.M., Halpern,A.L.,
                                                                                                                                                                                                                                                                                                                                                                                                  Human papillomavirus
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      U34122.1 GI:1098749
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U34122
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                                                                                                                                                                                                                                                                                                                              and Jenison, S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                    Human papillomavirus
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                                                                                                                                                                                                                                           7494284
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FAFRDLCIVYRDGNPYAVCDKCLKFYSKISBYRHYCYSLYGTTLBQQYNKFLCDLLIR
CINCQKFLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /product="early transforming protein
/protein_id="AAA91668.1"
/db_xref="GI:1098748"
/db_xref="taxon:10566"
/nofe="collected by cervical lavage
Portland, Oregon, United States."
                                                  organism="Human papillomavirus"
|mol type="genomic DNA"
| isolate="OR 4997"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Portland, Oregon,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             note="collected by cervical lavage portland, Oregon, United States."
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                organism="Human papillomavirus"
mol_type="genomic DNA"
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Pred. No.
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, T-10, Mail Stop K710, Los
                                                                                                                                                      Farmer, Los Alamos National, T-10, Mail Stop K710, Los
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                     at Kaiser
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                       Permanente,
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ORGANISM
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HPU34123
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VERSION
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   Best Local Similarity
Matches 28; Conserva
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and Jenison, S.A.

and Jenison, S.A.

Human papillomavirus type 16 variant lineages in United States populations characterized by nucleotide sequence analysis of the E6, L2, and L1 coding segments

J. Virol. 69 (12), 7743-7753 (1995)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human papillomavirus
Human papillomavirus
Viruses, dsDNA viruses, no RNA stage, Papillomaviridae,
unclassified Papillomaviridae.
1 (bases 1 to 456)
Yamada, T., Wheeler, C.M., Halpern, A.L., Stewart, A.C., Hi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human papillomavirus protein E6 (E6) gene, U34123
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                                                                                                                                                                                                                                                                                                                                                                                   Submitted (16-AUG-1995) Andrew D. Farmer, Los Alamos National Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los Alamos, NM 87501, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                       Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Farmer, A.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 U34123.1 GI:1098751
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   Conservative
                                                                         /gene="E6"
/codon_start=1
/codon_start=1
/product='early transforming protein E6"
/protein_id="AAA91670.1"
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/protein_id="AAA91669.1"
/protein_id="AAA91669.1"
/db_xref="G1:198750"
/translation="MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYD FAFRDLCIVYKNGNPYAVCDKCLKFYSKISEYRHYCYSVYGTTLEQQYNKPLCDLLIR CINCQKPLCPESKQRHLDKKQRPHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                                                                                                                                                                                                                        Portland,
                                                                                                                                                                                                                                                           /note="collected by cervical lavage at Kaiser Permanente,
Portland, Oregon, United States."
                                                                                                                                                                                                                        'gene="E6"
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                                                                                                                                                                                                             . .456
                                                                                                                                                                                                                                                                                                        mol_type="genomic DNA"
isolate="OR 5110"
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100.0%; Score 28; DB 10;
100.0%; Pred. No. 0.0025;
tive 0; Mismatches 0
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Pred. No.
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0.0025;
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                              Length
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HPU34125
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HPU34124
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1 GAACAGCAATACAACAAACCGTTGTGTG 28
                                                                                                                                         456 bp DNA linear VRL 08-MAR-19:
Human papillomavirus type 16, isolate OR 6106, early transforming
protein E6 (B6) gene, complete cds.
U34125
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Human papillomavirus type 16, isolate OR 5428, early transforming
protein E6 (E6) gene, complete cds.
U34124
                          Human papillomavirus
Human papillomavirus
Viruses; dsDNA viruses,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Submitted (16-AUG-1995) Andrew D. Farmer, Los Alamos National
Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los
Alamos, NM 87501, USA
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Human papillomavirus type 16 variant lineages in United States
Human papillomavirus type 16 variant lineages in United States
populations characterized by nucleotide sequence analysis of the
E6, L2, and L1 coding segments
J. Virol. 69 (12), 7743-7753 (1995)
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Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
unclassified Papillomaviridae.
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Direct Submission
                                                                                                                    U34125.1 GI:1098755
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                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /translation="mfqdpqerprklpqlcTelqTT1HeI1LeCvycKqqllrrevyd
pafrdlcIvyrdgnpyavcdkclkfyskIsevrhycyslygTTleqqynkplcDllIr
cIncqkplcpeekqrhldkkqrfhnIrgrwTgrcmsccrssrTrreTql"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /codon_start=1
/product="early transforming
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note="collected by cervical lavage at Portland, Oregon, United States."
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/isoTate="OR 5428"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Human papillomavirus"
/mol_type="genomic DNA"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /gene="E6"
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NA viruses, no RNA stage;
Papillomaviridae.
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Pred. No. 0.0025;
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                            Papillomaviridae;
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HPU34126
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VERSION
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JOURNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      265
                                                                                                                                                                                                                                                                   Human papillomavirus
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
unclassified Papillomaviridae.
1 (bases 1 to 456)
Yamada,T., Wheeler,C.M., Halpern,A.L., Stewart,A.C., Hildesheim,A.
                                                                                                                                                                                 and Jenison, S.A.
Human papillomavirus type 16 variant lineages in United States
populations characterized by nucleotide sequence analysis of the
E6, L2, and L1 coding segments
J. Virol. 69 (12), 7743-7753 (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                               Human papillomavirus type
protein E6 (E6) gene, comp
U34126
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Submitted (16-AUG-1995) Andrew D. Farmer, Los Alamos National
Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los
Alamos, NM 87501, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            E6, L2, and L1 (12), J. Virol. 69 (12),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human papiliomavirus type 16 variant lineages in United States populations characterized by nucleotide sequence analysis of t) E6, L2, and L1 coding segments
J. Virol. 69 (12), 7743-7753 (1995)
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                                                      Submitted (16-AUG-1995) Andrew D. Farmer, Los Alamos National
Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los
Alamos, NM 87501, USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
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                                                                                                                 Direct Submission
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /gene="E6"
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/codon_start=1
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FAFRDLCIVYRDGNPYAVCDKCLKFYSKISBYRYYCYSLYGTTLEQQYNKPLCDLLIR
CINCQKPLCPEBKQRHLDKKQRPHNIRGRWTGRCMSCCRSSRTRRETQL"
/organism="Human papillomavirus"
                                 Location/Qualifiers
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mol_type="genomic DNA"
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Pred. No. (
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HPU34127
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                                                                                                                                                                                                                                                                                                                                                         Submitted (16-AUG-1995) Andrew D. Laboratory, HIV Sequence Database, Alamos, NM 87501, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human papiliomavirus type 16 variant lineages in United States populations characterized by nucleotide sequence analysis of the E6, L2, and L1 coding segments
J. Virol. 69 (12), 7743-7753 (1995)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and Jenison, S.A.
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Yamada, T., Wheeler, C.M., Halpern, A.L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          unclassified Papillomaviridae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human papillomavirus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             papillomavirus
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Portland, Oregon, United States."
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/product = rearly transforming protein E6"
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/bb_xref="GI:1098760"
/cb_xref="GI:1098760"
                                                                                                                                                                                                      Portland, Oregon,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /codon_start=1
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Portland, Oregon, United States."
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                                                                                                                                                                                                                                                                                                                                     ocation/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   'gene="E6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 . 456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      . 456
                                                                                                                                                  .456
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 28; DB 10;
Pred. No. 0.0025;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                .c DNA"
                                                                                                                                                                                                                                                                                                                                                                          Farmer, Los Alamos National, T-10, Mail Stop K710, Los
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Stewart, A.C., Hildesheim, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 456;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              early transforming
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                analysis of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VRL 08-MAR-1996
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RESULT 46
HPU34129
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AUTHORS
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KEYWORDS
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HPU34128
          VERSION
                                                           DEFINITION
                         ACCESSION
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                                                                                                                                                                                                                                  Best Loc
Matches
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Best Local S
Matches 28
                                                                                                                                                                                                                                                                Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                           CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                Local Similarity
HPU34129
45
4 Human papillomavirus type 1
protein E6 (E6) gene, compl
U34129
U34129-1 GI:1098763
                                                                                                                                                              265
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alamos,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (16-AUG-1995) Andrew D. Farmer, Los Alamos National Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
unclassified Papillomaviridae.
1 (Dases 1 to 456)
Yamada,T., Wheeler,C.M., Halpern,A.L., Stewart,A.C., Hi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HPU34128 456 bp DNA Human papillomavirus type 16, isolate OR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       J. Virol. 69 (12),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          and Jenison, S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  U34128.1 GI:1098761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Laboratory, HIV Sequence Database,
Alamos, NM 87501, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Farmer, A.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7494284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          rndod
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein E6 (E6)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                          GAACAGCAATACAACAAACCGTTGTGTG 28
                                                                                                                                                            GAACAGCAATACAACAAACCGTTGTGTG 292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAACAGCAATACAACAAACCGTTGTGTG 292
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (bases 1 to 456)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      In papillomavirus type 16 variant lineages in United States lations characterized by nucleotide sequence analysis of the L2, and L1 coding segments virol. 69 (12), 7743-7753 (1995)
                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                              /gene="B6"
/codon_start=1
/codon_start=1
/product="early transforming protein E6"
/protein id="AAA91675.1"
/protein id="AAA91675.1"
/db xref="G1:1098762"
/translation="MFQDPQERPIKLPDLCTELQTTIHDIILECVYCKQQLLRREVYD
/translation="MFQDPQERPIKLPDLCTELQTTHDIILECVYCKQQLLRREVYD
                                                                                                                                                                                                                                                                                                                     CINCOKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note="collected by cervical lavage at Portland, Oregon, United States."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            'gene="E6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              mol_type="genomic DNA" isolate="OR 7145"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               organism="Human papillomavirus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                             . 456
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Pred. No. 0.0025;
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16,
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                                                    bp DNA
, isolate OR
                                           cds.
                                                                                                                                                                                                                                                0.0025
                                                                                                                                                                                                                                                                DB 10;
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                                                     linear
7574, earl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   7145, early transforming
                                                                                                                                                                                                                                                               Length 456;
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                                                                                                                                                                                                                              Indels
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                                                       early transforming
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                                                                         VRL 08-MAR-1996
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REFERENCE
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SOURCE
ORGANISM
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HPU34130
LOCUS
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PUBMED
REFERENCE
AUTHORS
TITLE
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AUTHORS
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ORGANISM
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                                                                                                                                                                                                                                                                                                                   ACCESSION
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 28
                       AUTHORS
                                                                                                                                          TITLE
                                                                                                                                                                            AUTHORS
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       JOURNAL
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                                                                                                                                                                                                                                                                                                                                                                                                       47
                                                                                                                                                                                                                                                                                                                                                                                                                                                           265
                                                                    and Jenison, S.A.

Human papillomavirus type 16 variant lineages in United States populations characterized by nucleotide sequence analysis of the E6, L2, and L1 coding segments

J. Virol. 69 (12), 7743-7753 (1995)
                                                                                                                                                                                                                                                                                                                            HPU34130 456 bp DNA linear VRL 08-MAR-19: Human papillomavirus type 16, isolate OR 7587, early transforming protein E6 (E6) gene, complete cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GAACAGCAATACAACAAACCGTTGTGTG 28
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Human papillomavirus
Viruses; dsNNA viruses, no RNA stage; Papillomaviridae;
unclassified Papillomaviridae.
                                                                                                                                                                                                                             Human papillomavirus
Viruses; dsDNA virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (16-AUG-1995) Andrew D. Farmer, Los Alamos National Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los Alamos, NM 87501, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            E6, L2, and L1, J. Virol. 69 (12),
   Submitted (16-AUG-1995) Andrew D. Farmer,
                       Farmer, A.D.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human papillomavirus type 16 variant lineages in United States populations characterized by nucleotide sequence analysis of the E6, L2, and L1 coding segments J. Virol. 69 (12), 7743-7753 (1995)
                                                                                                                                                                        Yamada, T., Wheeler, C.M., Halpern, A.L., Stewart, A.C., Hildesheim, A.
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                                                                                                                                                                                                                                                               Human papillomavirus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 (bases 1 to 456)
Yamada, T., Wheeler, C.M., Halpern, A.L., Stewart, A.C., Hildesheim, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   7494284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (bases 1 to 456)
                                                       (bases 1 to 456)
                                                                                                                                                                                         (bases 1 to 456)
                                                                                                                                                                                                            ıses; dsDNA viruses, no RNA stage; Papillomaviridae;
lassified Papillomaviridae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Godon_start=1
/Godon_start=1
/product="early transforming protein E6"
/protein id="AAA91676.1"
/db_xref="GI:1098764"
/translation="MFQDPQERPKLPQLCTELQTTIHEIILECVYCKQQLLRREVYD FAFRDLCIVERGNYYAVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIR CINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        mol type="genomic isolate="OR 7574"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         organism="Human papillomavirus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .456
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
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                                                                                                                          sequence analysis of the
     Los Alamos National
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                                                                                                                                                                                                                                                                                                                                                                     VRL 08-MAR-1996
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HPU34131
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VERSION
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ORGANISM
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                                                                                                                                                                                                                                                                                                                                                                                     Human papillomavirus
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
unclassified Papillomaviridae.
1 (bases 1 to 456)
Yamada, T., Wheeler, C.M., Halpern, A.L., Stewart, A.C., Hildesheim, A.
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456 bp DNA linear VRL 08-MAR-1996
Human papillomavirus type 16, isolate OR 7632, early transforming
protein E6 (E6) gene, complete cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Submitted (16-AUG-1995) Andrew D. Farmer, Los Alamos National
Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los
Alamos, NM 87501, USA
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Direct Submission
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                                                                                                                                                                                                        Location/Qualifiers
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                                                                        'gene="E6"
                                                                                                     /note="collected by cervical lavage
Portland, Oregon, United States."
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HPU34132
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Local Similarity
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U34132
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Yamada, T., Wheeler, C.M., Halpern, A.L.,
and Jenison, S.A.
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Viruses; dsDNA viruses,
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Direct Submission
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Human papillomavirus
Viruses, dabNA viruses, no RNA stage; Papillomaviridae;
unclassified Papillomaviridae.
1 (bases 1 to 456)
Yamada,T., Wheeler,C.M., Halpern,A.L., Stewart,A.C., Hildesheim,A. and Jenison,S.A.
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J. Virol. 69 (12), 7743-7753 (1995)
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Direct Submission
Submitted (16-AUG-1995) Andrew D. Farmer, Los Alamos National
Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los
Alamos, NM 87501, USA
Location/Qualifiers
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Carter, N.M.
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Gen-Probe Incorporated; San Diego, CA
Location/Qualifiers
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CR759829
CR759829
AC136444
AC106033
AC171163
AC171163
AC17176
AC093669
AL355420
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AC073195
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AL356000
AC093009
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AC003678
AC100757
AY572796
AL138805
AC100820
BS0000123
AC004137
CR759904
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AC138702
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AL13805 Human DNA

AC100830 Homo sapi

BS000122 Pan trogl

BS000122 Pan trogl

AC004137 Human Chr

CR75906 Human DNA

AC138702 Homo sapi

AL355794 Human DNA

AC138702 Homo sapi

BY511247 Mouse DNA

AF18695 Homo sapi

EX511247 Mouse DNA

AF18695 Homo sapi

CR759829 Human DNA

AC13644 Homo sapi

AC11613 Homo sapi

AC171163 Tachyglos

AC01365 Homo sapi

AC17116 Tachyglos

AC013776 Drosophil

EX0013776 Drosophil

EX0013776 Homo sapi

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Gen-Probe Incorporated; San Diego, CA
Location/Qualifiers
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Sequence 87 from patent US
AR349147
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Carter, N.M.
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Gen-Probe Incorporated; San Diego, CA
Location/Qualifiers
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Nucleic acid probes complementary to human
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US 6583278-A 88 24-JUN-2003;
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/mol_type="genomic"
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Walsh, C., Chao, H., Mansfield, G.S., Pattaraju, M.,
Garciamblanco, M.A. and Mitchell, L.G.
SPLICEOSOME MEDIATED RNA TRANS-SPLICING
Patent: JP 2005176849-A 118 07-JUL-2005;
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SPLICEOSOME MEDIATED RNA
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SPLICEOSOME MEDIATED RNA
DD187316
1 (bases 1 to 138)
Walsh, C., Chao, H., Mansfield, G.S., P.
GarciaMblanco, M.A. and Mitchell, L.G.
                                                synthetic construct
synthetic construct
                                                                          DD187319.1 GI:85643671 JP 2005176849-A/121.
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                                      other sequences; artificial sequences.
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29-AUG-2001 US
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08-JAN-2001 US 09/756095,08-JAN-2001 US 09/756096
AN-2001 US 09/756097,20-APR-2001 US 09/838858, PR
UG-2001 US 09/941492
christopher walsh,hengjun chao,gary s mansfield,madaia
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/mol_type="unassigned DNA"
/db_xref="taxon:32630"
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/mol_type="genomic
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             Baker, C.
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PN JP 20051768
PD 07-JUL-2005
PF 07-JAN-2005
PR 08-JAN-2001
08-JAN-2001 US
29-AUG-2001 US
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Human papillomavirus type 16
Viruses, dsDNA viruses, no RN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human papillomavirus mRNA, partial cds.
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U59900.1 GI:1405361
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JP 2005176849-A/121
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                                                                                                                                                         variant"
                                                                                                                                                                                          sequencing"
                                                                                                      /protein_id="AAB03505.1"
/db_xref="GI:1405362"
                                                                                                                                                                                                                                                                                                              ocation/Qualifiers
                                                                                                                              product="E6E"
                                                                                                                                                                 note="truncated
                                                                                                                                                                                                                                                db_xref="taxon:333760"
                                                                                                                                                                                                                                                             strain="SIHA"
                                                                                                                                                                                   . 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 21; 100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 type
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9 16
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Shippy,R., Siwkowski,A. and Hampel,A. Direct Submission
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-JAN-2005 JP 2005003076
08-JAN-2001 US 09/756095,08-JAN-2001 US 09/75097,20-APR-2001 US 09/838858,
JG-2001 US 09/756097,20-APR-2001 US 09/83858,
JG-2001 US 09/941492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    christopher walsh, hengjun chao, gary s
/note="site of mutation (nucleotide 442 in genome);
mutation results in an amino acid change from E to I
the full-size transcript is translated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                          /organism="Human papillomavirus
/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                   map="155-506 in the genomic map"
note="The mutation at site 442 i
                                                                                                              translation="ELQTTIHDIILECVYCKQQLLRREVY"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RNA stage;
                                                                                                                                                                                                                            protein
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                                                                                                                                                                                                                            product
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Papillomaviridae;
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major E6E7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      mansfield, madaia
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Е
                                                                                                                                                                                                                                                                                  e E6E7 major splice
clones and PCR batch
                                                                                                                                                                                                                            the major splice
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HPU14515/c
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Best Local Similarity 100.0%;
Matches 21; Conservative
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                                                                                                                                                                                                                                                                                                                                                                  CDS
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Human papillomavirus
Viruses, dsDNA viruses,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HPU14515
Human papillomavirus clone HPV1629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Direct Submission
Submitted (07-SEP-1994) Dante F. Galutira, I
Newfoundland, Discipline of Pathology, Fac.
Newfoundland, AlB 3V6, Canada
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 245)
Haegert, D.G., Galutira, D.F. and Younghusband, B.H.
Sequence variation in the E6 gene of human papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Galutira, D.F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unpublished
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                                                                                                                                                      /note="A to G t
Number K02718,
/replace="a"
                                  /gene="E6"
/note="T to G transversion from Number K02718, position 350; NCB /replace="t"
                                                                                                        /note="C to T transition Number K02718, position 3
                                                                                                                                                                                                                            /note="T to A transversion from PA16, Number K02718, position 286; NCBI gi:
                                                                                                                                                                                                                                                                          /Godon_start=2
/product="%6 protein"
/protein_id="AAB60569.2"
/protein_id="AAB60569.2"
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                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Human papillomavirus"
/mol type="genomic DNA"
/strain="HPV16"
 /gene="E6"
/note="A to
                                                                                                                                                                                                                                                       'gene="E6"
                                                                                                                                                                                                                                                                                                                                                   gene="B6"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GI:984951
                                                                                              replace="c"
                                                                                                                                'gene="E6"
                                                                                                                                                                                           gene="E6"
                                                                                                                                                                                                                  replace="t"
                                                                                                                                                                                                                                                                                                                                                                                                                   clone="HPV1629"
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0.29;
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NCBI gi:
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NCBI gi: 333031"
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BI gi:
PA16,
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ein (E6)
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i: 333031"
                                              GenBank
333031"
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333031"
 GenBank Accession
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Jene, partial
                                                                                                                                                                                                                                                                                                                                                                                                     carcinoma"
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RESULT 10
HPU14512/c
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HPU14511/c
LOCUS
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U14511.1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Jnpublished
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21; Conservative
                                                                                                                   Similarity
                                                            CAGGACACAGTGGCTTTTGAC
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                                                                                                        Conservative
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                                                                                                                                                                                                                                                                                                                           gene="E6"
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1 CAGGACACAGTGGCTTTTGAC 21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 (bases 1 to 253)
Haegert, D.G., Galutira, D.F. and Younghusband, B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Viruses; dsDNA viruses, no RNA stage; Papillomaviridae; unclassified Papillomaviridae.
                                                                                       CAGGACAGTGGCTTTTGAC 21
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                                                                                                                                                                                          /note="T to G transversion from PA16,
Number K02718, position 350; NCBI gi:
/replace="t"
                                                                                                                                                                                                                                                           /gene="E6"
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EQQYNKPLCDLLIRCINCQKPLCPBEKQRHLDKKQRFHNI"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Number K02718, position 364; NCBI gi: 333031"
/replace="a"
                                                                                                                                                                                                                                                                                                                                                                                                                                                               organism="Human papillomavirus"
|mol_type="genomic DNA"
|strain="HPV16"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                        cell_line="Caski and Siha"
                                                                                                                                                                                                                                                                                                                                                                                                                                                    db xref="taxon:10566"
                                                                                                                                                                                                                                                                                                                                                                                             tissue_type="cervical"
                                                                                                                                                                                                                                                                                                                                                                                                                                     'clone="HPV1601"
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Pred. No. 0.2
0; Mismatches
                                                                                                                        Score 21; DB
Pred. No. 0.2
); Mismatches
                                                                    185
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271
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. Medicine, St. John'
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papillomavirus
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333031"
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HPU14513/c
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                                                                                                                                                                                                                                                                                                                                                                                          Local
                                                                                                                                                                                                                                                                                                                    215
                                                                                               Human papillomavirus
Human papillomavirus
Viruses; dsDNA viruses, no RNA
unclassified Papillomaviridae.
1 (bases 1 to 272)
Galutira, D.F.
Direct Submission
Submitted (07-SEP-1994)
                                                                    1 (bases 1 to 272)
Haegert,D.G., Galutira,D.F.
Sequence variation in the E
                                                                                                                                                                                                                             HPU14513
Human papillomavirus clone HPV1607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Submitted (07-SEP-1994) Dante F. Galutira, Memorial University of Newfoundland, Discipline of Pathology, Fac. Medicine, St. John's, Newfoundland, AlB 3V6, Canada
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 (bases 1 to 271)
Haegert, D.G., Galutira, D.F. and Younghusband, B. Sequence variation in the E6 gene of human papi. Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human
                                                                                                                                                                                     U14513.1 GI:984947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Viruses;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human
                                                       Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Galutira, D.F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Viruses; dsDNA viruses, no RNA stage; Papillomaviridae; unclassified Papillomaviridae.
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Human papillomavirus
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                                        (bases 1 to 272)
                                                                                                                                                                                                                                                                                                                                                                             Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                               /note="T to G transversion from PA16, GenBank Accession
Number K02718, position 310; NCBI gi: 333031"
/replace="t"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /trānslation="VYDFAFRDLCIVYRDGNPYAVCDKCLKLYSKISEYRHYCYSLYG
TTLEQQYNKFLCDLLIRCINCQKFLCFBEKQRHLDKKQRFHNIRGR"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /codon_start=2
/product="B6 protein"
/protein_id="AAB60566.1"
/db_xref="GI:984946"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             tissue_type="cervical tissue"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Human papillomavirus"
/mol_type="genomic DNA"
/strain="HPV16"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gene="E6"
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                                                                                                                                                                                                                                                                                                                                                                                         Score 21;
Pred. No.
 Dante
                                                                                                                                                                                                                                                                                                                                                                           Mismatches
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                                                                                                                            RNA stage; Papillomaviridae;
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                                                                                     and Younghusband, B.
                                                                    gene
F. Galutira,
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E6 protein (E6)
                                                                      human
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                                                                   nd,B.H.
papillomavirus type
 Memorial University
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papillomavirus
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gene, partial
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SOURCE
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LOCUS
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U14514.1
                                                                                                                                                                                                                                                                                                                                                                                                              Submitted (07-8EP-1994) Dante F. Galutira, Memorial Un
Newfoundland, Discipline of Pathology, Fac. Medicine,
Newfoundland, AlB 3V6, Canada
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 (Dases 1 to 273)
1 (Dases 1 to 273)
Haegert, D.G., Galutira, D.F. and Younghusband, B.H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cds.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Galutira, D.F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Viruses; dsDNA viruses, no RNA stage; unclassified Papillomaviridae.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /gene="E6"
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/note="C to G transversion from PA16,
/note="C to G transversion from PA16,
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/note="E6"
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/note="E6"
/note="C to G transversion from PA16,
/note="C 
/codon_start=2
/product="E6 protein"
/protein_id="AAB60568.2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /replace="c"
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TTLEQQYNKFLCDLLIRCINCQKFLCPEEKQRHLDKKQRFHNIRGR"
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/protein_id="AAB60567.2"
/db_xref="GI:12831648"
                                                                                                                                                                                                                                                                                                   mol_type="genomic
strain="HPV16"
                                                                                                                                                                                                                                                                                                                           organism="Human papillomavirus"
|mol_type="genomic DNA"
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mol_type="genomic DNA"
                                                                                            gene="E6"
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                                                                                                                                                                                 tissue_type="cervical tissue from invasive carcinoma" . .273
                                                                                                                                                                                                                                            db_xref="taxon:10566"
clone="HPV1627"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              . .>272
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333031"
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Best Local Similarity
Matches 21; Conserv
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                                                                                                                                                                                                                                                                                       Galutira, D.F.
Direct Submission
Submitted (07-SEP-1994) Dante F. Galuti
Newfoundland, Discipline of Pathology,
Newfoundland, AlB 3V6, Canada
Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                         Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                       Haegert,D.G., Galutira,D.F. and Younghusband,B.H.
Sequence variation in the E6 gene of human papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                    1 (bases 1 to Haegert, D.G., G
                                                                                                                                                                                                                                                                                                                                                                                                                                            unclassified Papillomaviridae.
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/gene="E6"
/note="T to A transversion from PA16,
/note="T to A transversion 286; NCBI gi:
                                                             /codon_start=2
/product="86 yotein"
/protein_id="AAB60570.1"
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/translation="VYDFAFRDLCIVYRDGNPYAVCDKCLKFYSKISEYRYYCYSVYG
/translation="VYDFAFRDLCIVCPEEKQRHLDKKQRFHNIRGRW"
                                                                                                                                                                                                                                                                                                                                                                                                                                                         dsDNA viruses, no RNA stage;
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Number K02718,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /translation="VYDFAFRDLCIVYRDGNPYAVCDKCLKFYSKISEYRYYCYSLYG
TTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLDKKQRFHNIRGR"
                                                                                                                                                                                                                                          /organism="Human papillomavirus"
/mol_type="genomic DNA"
/strain="HPV16"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /gene="E6"
                                                                                                                                                'gene="E6"
                                                                                                                                                                         'gene="E6"
                                                                                                                                                                                       tissue_type="cervical tissue from invasive carcinoma" . .274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GI:984953
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clone="HPV1649"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  'gene="E6"
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100.0%; Pred. No.
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nology, Fac.
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NCBI gi:
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AF404704
AF404704.1
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Direct Submission

Submitted (31-JUL-2001) Department of Infectious Diseases,

Submitted (31-yun-2001) Department of Infectious Diseases,

University of Sydney, Blackburn Building, D06, Off Western Avenue,

Camperdown, Sydney, New South Wales 2006, Australia

Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human papillomavirus type 16
Human papillomavirus type 16
Viruses; dsNNA viruses, no RNA stage;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human papillomavirus type gene, partial cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                Int. J. (
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Watts,K.J., Thompson,C.H., Cossart,Y.E. and Rose,B.R. Sequence variation and physical state of human papillomavirus 16 cervical cancer isolates from Australia and New Caledonia Int. J. Cancer 97 (6), 868-874 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                Watts, K.J.,
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               Similarity
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Number K02718,
/replace="t"
                                                                           /Codon_start=2
/product="E6_protein"
/protein_id="AAL01365.1"
/protein_id="AAL01365.1"
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/translation="DIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPYAVCDKCLK
/translation="DIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPYAVCDKCLK
                                                                                                                                                                                                                                                            /organism="Human papillomavirus type 16"
/mol_type="genomic DNA"
/isolate="HPV16E6CC13"
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Number K02718,
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                                                                                                                                                                                                                                              db_xref="taxon:333760"
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            100.0%; Score 21; DB
100.0%; Pred. No. 0.3;
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 Mismatches
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                              DB 10;
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S51110/c
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AF404692/c
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                                                                                                                                                                                                       21;
Genomic, 421 nt].
S51110
S51110.1 GI:262061
                                           S51110 421 orf E6 [human papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Submitted (31-JUL-2001) Department of Infectious Diseases, University of Sydney, Blackburn Building, D06, Off Western Camperdom, Sydney, New South Wales 2006, Australia Location/Qualifiers
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11857370
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Watts,K.J., Thompson,C.H., Cossart,Y.E. and Rose,B.R.
Sequence variation and physical state of human papillomavirus type
16 cervical cancer isolates from Australia and New Caledonia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human papillomavirus type 16
Human papillomavirus type 16
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
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                                                                                                                                                                                                                      Similarity
                                                                                                                                           CAGGACACAGTGGCTTTTGAC 174
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                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cancer
                                                                                                                                                                                                                                                                                            /gene="87"
/codon_start=1
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/protein_id="AAL01341.1"
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/bb_xref="GI:15529570"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /db_xref="taxon:333760"
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/db xref="DLCIVYRDGNPYAVCDKCLKFYSKISEYRHYCYSLYGTTLEQQF
/translation="DLCIVYRDGNPYAVCDKCLKFYSKISEYRHYCYSLYGTTLEQQF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <1. .313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               organism="Human papillomavirus/mol_type="genomic_DNA"/isolate="HFV16E6CC1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .370
                                                                                                                                                                                                                                                                                                                                                                                          gene="E7"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  'gene="E6"
                                                                                                                                                                                                                                                                                  translation="MHGDTPTLHEYMLDLQPE"
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Pred. No. 0.3;
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                                                                                                                                                                                                                                 Length 370;
                                               linear
head and
                                                  neck tumor,
                                                               VRL 08-MAY-1993
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AF404695/c
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Human papillomavirus type 16
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Viruses; dsDNA viruses,
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Tyan,Y.S., Liu,S.T., Ong,W.R., Chen,M.L.,
Detection of Epstein-Barr virus and human
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J. Clin. Microbiol. 31 (1), 53-56 (1993)
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                                                                                                                                                                                                                                                                                                                           organism="Human papillomavirus"
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|isolate="HPV16E6CC4"
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/mol_type="genomic DNA"
/db_xref="taxon:10566"
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Human papillomavirus type 16
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
Alphapapillomavirus.
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Watts, K.J., Thompson, C.H., Cossart, Y.E. and Rose, B.R.
Direct Submission
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398. .>451
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Submitted (31-UTL-2001) Department of Infectious Diseases, University of Sydney, Blackburn Building, D06, Off Western Avenue,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human papillomavirus type 16
Human papillomavirus type 16
Viruses, daDNA viruses, no RNA stage; Papillomaviridae;
Alphapapillomavirus.
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AF404699
AF404699.1 GI:15529590
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Camperdown, Sydney, New South Wales 2006, Australia
Location/Qualifiers
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protein (E6) and
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                                                           Human papillomavirus type 16
Human papillomavirus type 16
Viruses; dsDNA viruses, no RNA
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AF404701
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Submitted (31-JUL-2001) Department of Infectious Diseases,
University of Sydney, Blackburn Building, D06, Off Western Avenue,
Camperdown, Sydney, New South Wales 2006, Australia
1 (bases 1 to 451)
Watts, K.J., Thompson, C.H., Cossart, Y.E. and Rose, B.R.
Sequence variation and physical state of human papillomavirus type
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                                                Alphapapillomavirus.
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21; Conservative
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lphapapillomavirus.
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CLKFYSKISEYRHYCYSVYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLDKKQ
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mol_type="genomic DNA"
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Human papillomavirus type 16
Viruses; dsDNA viruses, no RN
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                   Location/Qualifiers
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AF404703 451 bp DNA linear Human papillomavirus type 16 isolate HPV16E6CC12 and E7 protein (E7) genes, partial cds.
2 (bases 1 to 451)
Watts,K.J., Thompson,C.H., Cossart,Y.B. and Rose,B.R.
Direct Submission
Submitted (31-JUL-2001) Department of Infectious Diseases,
University of Sydney, Blackburn Building, D06, Off Western
Camperdown, Sydney, New South Wales 2006, Australia
                                                                                                                                                                                                                                  Watts,K.J., Thompson,C.H., Cossart,Y.B. and Rose,B.R. Sequence variation and physical state of human papillomavirus type 16 cervical cancer isolates from Australia and New Caledonia Int.J. Cancer 97 (6), 868-874 (2002)
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RFHNIRGRWTGRCMSCCRSSRTRRETQL"
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ACCESSION
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AR167393/c
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Best Local S
Matches 21
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Matches 2
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              ORGANISM
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                                                                                                                                                                  337
                                                      AR177943
Sequence 6 :
AR177943
AR177943.1
                                                                                                                                                                                                                        21;
                                                                                                                                                                                                                                                                                                                    1 (bases 1 to 456)

Kipps, T.J. and Wu, Y.

Vaccines with enhanced intracellular processing

Patent: US 6287569-A 29 11-SEP-2001;

Location/Qualifiers

1. .456
                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                           AR167393 456 bp
Sequence 29 from patent US 6287569.
AR167393.1 GI:17903171
Unknown.
Unclassified
                                                                                                                                                                                                                                                                                                                                                                                                                              Unknown.
                            Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                      Unclassified.
                                                                                                                                                                                                                                     Similarity
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21; Conservative
                                                                                                                                                                                 CAGGACACAGTGGCTTTTGAC 21
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                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /Godon_start=3
/product="#6 protein"
/protein_id="#6 protein"
/protein_id="ALD1363.1"
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/translation="TIHNIILECYCKQOLLRREVYDFAFRDLCIVYRDGNPYAVCDK
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CLKFYSRISSTYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLDKKQ
CLKFYSRISSTYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLDKKQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol type="genomic DNA"
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/db_xref="taxon:333760"
<1._.395</pre>
                                                                                                                                                                                                                                                                                        /organism="unknown"
/mol_type="unassigned
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /codon_start=1
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/protein_id="AAL01364.1"
/db_xref="GI:15529604"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                translation="MHGDTPTLHEYMLDLQPE"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /gene="E6"
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                                                                                  from
                                                                                                                                                                                                                                   100.0%; Score 21; 100.0%; Pred. No.
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3 6313373.
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                                                                                                                                                                                                                                                Length 456
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                                                                                             linear
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AUTHORS
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AF327851/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human papillomavirus type 16 (E6) gene, complete cds.
AF327851 GI:12025467
                1 CAGGACACAGTGGCTTTTGAC 21
                                                                                                                                                                                                                                                                                                                                                                                                                              Direct Submission

Submitted (12-DEC-2000) Department
Xinjiang, 14 Shengli Road, Urumqi,
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cloning and Sequencing of HPV16 E6 gene from (
Biopsies in Xinjiang
Shengwu Huaxue Yu Shengwu Wuli Jinzhan (2001)
2 (bases 1 to 456)
Ma,Z. and Zhang,F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human papillomavirus type 16
Human papillomavirus type 16
Viruses; dasDNA viruses, no RN
Alphapapillomavirus
1 (bases 1 to 456)
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Eckert R.L. and Crish, J.F.

Tissue specific promoters and transgenic pharmaceuticals

Patent: US 6313373-A 6 06-NOV-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ma, Z., Qian, D., Ma, J., Zhang, F.
                                                                            Similarity
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CAGGACACAGTGGCTTTTGAC 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 21; DB ilarity 100.0%; Pred. No. 0.3; Conservative 0; Mismatches
                                                          100.0%;
larity 100.0%;
Conservative 0
                                                                                                                                   /gene="E6"
/gene="E6"
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/codon_start=1
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/protein_id="AAG45940.1"
/protein_id="AAG45940.1"
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/tanslation="MF0DPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYD
FAFRDLCIVYRDGNPYANCDKCLKFYSKISEYNHYCYSVYGTTLEQQYYKKPLCDLLIR
CINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                                                                                                                                                                                                                                                                           /specific host="Homo sapiens"
/db_xref="taxon:333760"
/note="HPV16"
                                                                                                                                                                                                                                                                                                                                                        /mol_type="genomic DNA"
/strain="Xinjiang"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="unknown"
/mol_type="unassigned DNA"
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1. .456
                                                                                                                                                                                                                                                                                                                                                                                                         organism="Human papillomavirus type 16"
                                                                                                                                                                                                                                                                               gene="E6"
                                                                                                                                                                                                                                                                                                                                                                                          proviral
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                                                                          Score 21; I
Pred. No. 0.
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                                                             Mismatches
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early transforming
                                                                                           DB 10; Length 456;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     of Biology, University of Xinjiang 830046, P.R. China
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                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ming protein E6 variant
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RESULT 27
HPU34108/c
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HPU34107/c
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Best Local :
 TITLE
                                 AUTHORS
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                                                                                                                                                                                                                                                                                                    337
                                                                                                                                                              456 bp DNA linear VRL 08-WAR-19:
Human papillomavirus type 16, isolate NM 9999, early transforming
protein E6 (E6) gene, complete cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    J. Virol. 69 (12),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Submitted (16-AUG-1995) Andrew
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human papillomavirus type 16 variant lineages in United States populations characterized by nucleotide sequence analysis of the E6, 12, and L1 coding segments J. Virol. 69 (12), 7743-7753 (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           and Jenison, S.A.
             1 (bases 1 to 456)
Yamada,T., Wheeler,C.M.,
and Jenison,S.A.
                                                                                 Viruses;
                                                                                               Human papillomavirus
                                                                                                                                                U34108.1 GI:1098721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Laboratory, HIV Sequence Database, NM 87501, USA
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protein E6 (E6) gene, complete cds.
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                                                              Viruses; dsDNA viruses, no RNA stage;
unclassified Papillomaviridae.
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Direct Submission
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                                                                                                             Human papillomavirus
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                                                                                                                                                                                                                                                                                                                                                                  Conservative
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es; dsDNA viruses,
papillomavirus type 16 variant lineages
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /db xref="taxon:10566"
/note="collected by cervical swab at the University of New
Mexico, New Mexico, United States."
1. .456
                                                                                                                                                                                                                                                                                                                                                                                                                                                   /translation="MFQDPQERPRKLPHLCTELQTTIHDIILECYYCKQQLLRREVYD
FAFRDLCIVYRDGNPYAVCDKCLKFYSKISEYRYYCYSVYGTTLEQQYNKPLCDLLIR
CINCQKPLCPEEKQRHLDKKQRPHNIRGRWTGRCMSCCRSSRTRRETQL"
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/protein_id="AAA91654.1"
/bb_xref="GI"1098720"
/db_xref="GI"1098720"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /gene="E6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gene="E6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     organism="Human papillomavirus"
mol_type="genomic DNA"
isolate="NM 4094"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                  Score 21; DB 10;
Pred. No. 0.3;
                                                                                                                                                                                                                                                                                                    317
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                               Halpern, A.L.,
                                                                                                                                                                                                                                                                                                                                                                  Mismatches
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16, isolate NM 4094, early
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Farmer, Los Alamos National
, T-10, Mail Stop K710, Los
                                                                              Papillomaviridae;
                               Stewart, A.C., Hildesheim, A.
                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Stewart, A.C.,
                                                                                                                                                                                                                                                                                                                                                                                                  Length 456;
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 United States
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HPU34109/c
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                                                                                                                                                                                                                                                                                                                                                                                  Human papillomavirus
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
unclassified Papillomaviridae.
                                                                                                                              Submitted (16-AUG-1995) Andrew D. Farmer, Los Alamos National Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los Alamos, NM 87501, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human papillomavirus type 16, İsola
protein E6 (E6) gene, complete cds.
U34109
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Submitted (16-AUG-1995) Andrew D. Farmer, Los Alamos National Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los Alamos, NM 87501, USA
                                                                                                                                                                                   Farmer, A.D.
Direct Submission
                                                                                                                                                                                                                                           E6, L2, and __
J. Virol. 69 (12),
                                                                                                                                                                                                                                                                                          Lugod
                                                                                                                                                                                                                                                                                                                                and Jenison, S.A.
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Yamada,T., Wheeler,C.M., Halpern,A.L.,
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Alamos, NM 87501,
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                                                                                                                                                                                                                     (bases 1 to 456)
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/codon_start=1
/product="early transforming protein E6"
/protein_id="AAA91655.1"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note="collected by cervical swab at the University of New
Mexico, New Mexico, United States."
1. .456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CINCQKPLCPEBKQRHLDKKQRPHNIRGRWTGRCMSCCRSSRTRRETQL"
/db_xref="taxon:10566"
/note="collected by cervical swab at the University of New
                                    /mol_type="genomic
/isolate="NM T197"
                                                       organism="Human papillomavirus"
|mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GI:1098723
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Pred. No. 0.3;
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HPU34110/c
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Human papillomavirus type 16, isolate NM T446, early transforming
protein E6 (E6) gene, complete cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human papillomavirus
Viruses, dsDNA viruses, no RNA
unclassified Papillomaviridae
                                                                                                                                                                                                                                                                                                                                                                                                  Submitted (16-AUG-1995) Andrew D. Farmer, Los Alamos National Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 (bases 1 to 456)
Yamada, T., Wheeler, C.M., Halpern, A.L.,
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     Conservative
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                                                                           /Godon_start=1
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/protein id="aaAs)1657.1"
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CINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTERETQL"
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CINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                                                                                                                                                                                                                           Mexico,
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                                                                                                                                                                                                                                                                       /db_xref="taxon:10566"
/note="collected by ce
                                                                                                                                                                                                                                                                                                       /mol_type="genomic DNA"
/isolate="NM T446"
                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                            'gene="E6"
                                                                                                                                                                                                                        gene="E6"
                                                                                                                                                                                                                                                                                                                                        organism="Human papillomavirus"
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tive 0;
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United States."
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                                                       456 bp DNA
Human papillomavirus type 16, isolate
protein E6 (E6) gene, complete cds.
U34112
U34112.1 GI:1098729
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Human papillomavirus type 16, isolate
protein E6 (E6) gene, complete cds.
U34111
Human papillomavirus
Human papillomavirus
Viruses; dsDNA viruses,
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J. Vicol. 69 (12), 7743-7753 (1995)
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Laboratory, HIV Sequence
Alamos, NM 87501, USA
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Yamada, T., Wheeler, C.M., Halpern, A.L., Stewart, A.C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  viruses; dsDNA viruses, no RNA stage;
unclassified Papillomaviridae.
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Viruses; dsDNA viruses,
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                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                    /codon_start=1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /noTe="collected by cervical swab at the University of New
Mexico, New Mexico, United States."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Human papillomavirus"
/mol type="genomic DNA"
/isolate="NM T455"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /gene="E6"
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Pred. No. 0.3
0; Mismatches
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Database, T-10, 
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 RNA stage;
                                                                                                                                                                                                                                                                                                        DB 10; Length 456;
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NM T455, ear
 Papillomaviridae;
                                                                                                              NM T529,
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Stop K710, Los
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y transforming
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HPU34113/c
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Best Local
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and Jenison, S.A.

Human papillomavirus type 16 variant lineages in United States populations characterized by nucleotide sequence analysis of the E6, L2, and L1 coding segments

L1. Virol. 69 (12), 7743-7753 (1995)
                Direct Submission
Submitted (16-AUG-1995) Andrew D.
Laboratory, HIV Sequence Database,
Alamos, NM 87501, USA
                                                                                                                                J. Virol. 69 (12),
                                                                                                                                           Human papillomavirus type 16 variant lineages in United States populations characterized by nucleotide sequence analysis of the E6, L2, and L1 coding segments J. Virol. 69 (12), 7743-7753 (1995)
                                                                                                                                                                                                                         1 (bases 1 to 456)
Yamada,T., Wheeler,C.M., Halpern,A.L.,
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Human papillomavirus
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Submitted (16-AUG-1995) Andrew D.
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Yamada,T., Wheeler,C.M., Halpern,A.L., Stewart,A.C.,
                                                                                                                                                                                                                  and Jenison, S.A.
                                                                                                                                                                                                                                                                    Viruses; dsDNA viruses, no RNA stage; Papillomaviridae; unclassified Papillomaviridae.
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                                                                                                                                                                                                                                                                                                                                                                                             protein E6 (E6) gene,
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                                                                                                        (bases 1 to 456)
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                                                                                                                                                                                                                                                                                                                                                                                                             papillomavirus type
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FAFRDLCIVYRDGNPYAVCDKCLKFYSKISBYRYYCYSVYGTTLEQQYNKFLCDLLIR
CINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /Codon_start=1
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/protein_id="AAA91659.1"
/db_xref="GI:1098730"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mexico, New
Location/Qualifiers
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/note="collected by cervical swab at the University of New
Mexico, New Mexico, United States."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       organism="Human papillomavirus"
|mol_type="genomic DNA"
|isolate="NM T529"
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100.0%; Pred. No. 0.
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e 16, isolate OR 0198,
                                       Farmer,
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                                                                                                                                                                                                                                  Stewart, A.C.,
                                     , Los Alamos National
Mail Stop K710, Los
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HPU34114/c
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TITLE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and Jenison,S.A.

Human papillomavirus type 16 variant lineages in United States Human papillomavirus type 16 variant lineages in United States populations characterized by nucleotide sequence analysis of the E6, L2, and L1 coding segments

1. Virol. 69 (12), 7743-7753 (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        456 bp DNA linear VRL 08-MAR-19: Human papillomavirus type 16, isolate OR 1905, early transforming protein B6 (B6) gene, complete cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 CAGGACACAGTGGCTTTTGAC
                                                                                                                                                                                                                                                                                                                                                                     Submitted (16-AUG-1995) Andrew D. Farmer, Los Alamos National Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los
                                                                                                                                                                                                                                                                                                                                                     Alamos,
                                                                                                                                                                                                                                                                                                                                                                                                          Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Yamada,T., Wheeler,C.M., Halpern,A.L., Stewart,A.C., Hildesheim,A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
unclassified Papillomaviridae.
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Viruses; dsDNA viruses,
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/protein_id="AAA91660.1"
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CINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
               /translation="MFQDPQERPTKLPDLCTELQTTIHDIILECVYCKQQLLRREVYD
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                                              /codon_start=1
/product="early transforming protein
/protein_id="AAA91661.1"
/db_xref="GI:1098734"
                                                                                                                                                                                                Portland,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CINCOKPLCPEEKORHLDKKORFHNIRGRWTGRCMSCCRSSRTRRETOL"
                                                                                                                                                                                                                                                        /organism="Human papillomavirus"
/mol_type="genomic DNA"
/isolate="OR 1905"
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/isolate="OR 0198"
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                                                                                                                                                                                                /note="collected by cervical lavage at Kaiser
/nortland, Oregon, United States."
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'ortland, Oregon, United States."
                                                                                                                          gene="E6"
                                                                                                                                                             'gene="E6"
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VERSION
KEYWORDS
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HPU34115/c
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                                                        RESULT 35
HPU34116/c
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Best Local Similarity
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Human papillomavirus type 16, isolate OR 2087, early
protein E6 (E6) gene, complete cds.
U34115
456 bp
Human papillomavirus type 16, isola
protein E6 (E6) gene, complete cds.
U34116
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Laboratory, HIV Sequence Database,
Alamos, NM 87501, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human papillomavirus type 16 variant lineages in United States populations characterized by nucleotide sequence analysis of the E6, L2, and L1 coding sequents
J. Vicol. 69 (12), 7743-7753 (1995)
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Yamada, T., Wheeler, C.M., Halpern, A.L.,
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Human papillomavirus
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unclassified Papillomaviridae.
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                                                                                                                      CAGGACACAGTGGCTTTTGAC
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                                                                                                                                                                           100.0%; Score 21;
larity 100.0%; Pred. No.
Conservative 0; Mismatch
                                                                                                                                                                                                                                               /gene="E6"
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/protein_id="AAA91662.1"
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/db_xref="GI:1098736"
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                                                                                                                                                                                                                                                                                                                                                                                                        Portland, Oregon,
                                                                                                                                                                                                                                                                                                                                                                                                          /note="collected by cervical lavage at
Portland, Oregon, United States."
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                                                                                                                                                                                                                                                                                                                                                                              'gene="86"
                                                                                                                                                                                                                                                                                                                                                                                                                                                    mol_type="genomic DNA"
isolate="OR 2087"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             organism="Human papillomavirus"
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                               isolate OR 3136, early transforming
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, T-10, Mail
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                                              linear
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Stop K710, Los
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HPU34117/c
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Viruses; dsDNA viruse
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Alamos, NM 87501, USA
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Direct Submission
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     Direct Submission
                   Farmer, A.D.
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                             (bases 1 to 456)
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/isolate="OR 3136"
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and Jenison, S.A.
and Jenison, S.A.
Human papillomavirus type 16 variant lin
populations characterized by nucleotide
p6, L2, and L1 coding segments
to virol. 69 (12), 7743-7753 (1995)
and Jenison, S.A.

and Jenison, S.A.

Human papillomavirus type 16 variant lineages in United States
Human papillomavirus type 16 variant lineages in United States
populations characterized by nucleotide sequence analysis of tl
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Viruses; dsDNA viruses, no RNA stage;
unclassified Papillomaviridae.
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456 bp DNA line
Human papillomavirus type 16, isolate OR 3473,
protein E6 (E6) gene, complete cds.
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Yamada, T., Wheeler, C.M., Halpern, A.L.,
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Yamada, T., Wheeler, C.M., Halpern, A.L., Stewart, A.C., Hildesheim, A.
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/groduct="early transforming protein E6"
/protein id="aaA91663.1"
/protein id="aAA91663.1"
/db_xref="GI:1098738"
/translation="MFQDPQBRPKLPHLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVERDGNYYAVCDKCLKFYSKISBYRYYCYSVYGTTLBQQYMKPLCDLLIR
CINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
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Pred. No. 0.3;
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Viruses; dsNNA viruses, no RNA stage; Papillomaviridae;
unclassified Papillomaviridae.
                                                                                                                                                                                                                                                                    Submitted (16-AUG-1995) Andrew D. Farmer, Los Alamos National
Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los
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U34118
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                                                                                                                                                                                                                                                   Laboratory, HIV Sequence Database,
Alamos, NM 87501, USA
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J. Virol. 69 (12), 7743-7753 (1995)
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Alamos, NM 87501, USA
                                                                                                                                                                                                                                                                                                           Direct Submission
                                                                                                                                                                                                                                                                                                                           Farmer,A.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 (bases 1 to 456)
Yamada,T., Wheeler,C.M., Halpern,A.L.,
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                                                                                                                                                                                                                                                                                                                                          (bases 1 to 456)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /product="early transforming protein E6"
(protein id="AAA91664.1"
/db.xref="G1:1098740"
/translation="MFQDFQERFIKLFDLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNFYAVCDKCLKFYSKISEYRYYCYSLYGTTLEQQYNKFLCDLLIR
                                                                                                      /note="collected by cervical lavage at Kaiser Permanente, Portland, Oregon, United States."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /db_xref="taxon:10566"
/note="collected by cervical lavage at Kaiser Permanente,
portland, Oregon, United States."
/gene="E6"
/codon_start=1
/product="early transforming protein E6"
                                                                                                                                                          organism="Human papillomavirus"

(mol type="genomic DNA"

isolate="OR 3759"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /gene="E6"
/codon_start=1
                                                                                                                                                                                                                                ocation/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            organism="Human papillomavirus"
|mol_type="genomic DNA"
|fsolate="OR 3473"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ocation/Qualifiers
                                                                          'gene="E6"
                                                                                                                                               db_xref="taxon:10566"
                                                         .456
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Pred. No. 0.3
); Mismatches
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HPU34119/c
LOCUS
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VERSION
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                                                             Matches
                                                                                           Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                          source
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                                                                              Local
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337
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Farmer,A.D.

Direct Submission
Submitted (16-AUG-1995) Andrew D. Farmer, Los Alamos National
Submitted (16-AUG-1995) Andrew D. Farmer, Los Alamos National
Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   456 bp numan papillomavirus type 16, is protein E6 (E6) gene, complete of U34119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human papillomavirus type 16 variant lineages in populations characterized by nucleotide sequence E6, L2, and L1 coding segments
J. virol. 69 (12), 7743-7753 (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human papillomavirus
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alamos,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           and Jenison, S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 (bases 1 to 456)
Yamada, T., Wheeler, C.M., Halpern, A.L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human papillomavirus
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                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     unclassified Papillomaviridae.
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                              CAGGACACAGTGGCTTTTGAC
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CAGGACACAGTGGCTTTTGAC
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                                                              Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            ₹
                                                                                                                                                         /gene="E6"
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CINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                                                                                                           CINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GI:1098743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /protein_id="AAA91665.1"
/db_xref="GI:1098742"
                                                                                                                                                                                                                                                                                                                         ortland, Oregon,
                                                                                                                                                                                                                                                                                                                                                                                                                                       ocation/Qualifiers
                                                                                                                                                                                                                                                                                        gene="E6"
                                                                                                                                                                                                                                                                                                                                 note="collected by cervical lavage at Kaiser Permanente,
                                                                                                                                                                                                                                                                                                                                                       db_xref="taxon:10566"
                                                                                                                                                                                                                                                                                                                                                                                        organism="Human papillomavirus"
                                                                                                                                                                                                                                                                                                                                                                          isolate="OR 4541"
                                                                                                                                                                                                                                                                                                                                                                                                                                                          87501,
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                                                                            Score 21;
Pred. No.
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Pred. No.
317
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                                                              Mismatches
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                                                                            0.3;
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                                                                                           Length
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RESULT 39

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AUTHORS
TITLE
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VERSION
KEYWORDS
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HPU34121/c
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Best Local S
Matches 21
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                                                                                                                                                                                                                                                                                                                                    456 bp
Human papillomavirus type 16, isola
protein E6 (E6) gene, complete cds.
U34121
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Human papillomavirus type 16, isolate OR 4716, early transforming
protein E6 (E6) gene, complete cds.
U34120
1 (bases 1 to 456)
Yamada, T., Wheeler, C.M., Halpern, A.L., Stewart, A.C., Hildesheim, Pamada, T., Wheeler, C.M., Halpern, A.L., Stewart, A.C., Hildesheim, Pamada, T., Wheeler, C.M., Halpern, A.L., Stewart, A.C., Hildesheim, Pamada, T., Wheeler, C.M., Especially, Pamada, Pamad
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 CAGGACACAGTGGCTTTTGAC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human papillomavirus
Viruses; dsDNA virus
                                                                                                                                                                                                                           Human papillomavirus
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Yamada,T., Wheeler,C.M., Halpern,A.L.,
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                                                                                                                                                                        Viruses; dsDNA viruses, no RNA stage; Papillomaviridae; unclassified Papillomaviridae.
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21; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (bases 1 to 456)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Human papillomavirus"
/mol type="genomic DNA"
/isolate="OR 4716"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     note="collected by cervical lavage at Kaiser Permanente, Portland, Oregon, United States."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gene="E6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gene="E6"
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100.0%; Pred. No.
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, T-10, Mail
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                                                                                                                    Stewart, A.C., Hildesheim, A.
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Stop K710, Los
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U34122.1
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456 bp DNA linear VRL 08-MAR-19
Human papillomavirus type 16, isolate OR 4997, early transforming
protein E6 (E6) gene, complete cds.
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Human papillomavirus type 16 variant lineages in United States
populations characterized by nucleotide sequence analysis of the
E6, L2, and L1 coding segments
J. Virol. 69 (12), 7743-7753 (1995)
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Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los
Alamos, NM 87501, USA
                                                                                                                                                                                                                                                                                                                                                                                                                               Submitted (16-AUG-1995) Andrew D. Farmer, Los Alamos National Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los
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                                                                                                                                                                                                                                                                                                                                           Laboratory, HIV Sequence Data
Alamos, NM 87501, USA
Location/Qualifiers
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Yamada, T., Wheeler, C.M., Halpern, A.L., Stewart, A.C., Hildesheim, A.
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Human papillomavirus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Viruses; dsDNA viruses, no RNA stage; Papillomaviridae; unclassified Papillomaviridae.
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/codon_start=1
/codon_start=1
/product="early transforming protein E6"
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/db_xref="G1:1098748"
/tdb_xref="G1:1098748"
/tdb_x
/note="collected by cervical lavage at Kaiser Permanente, Portland, Oregon, United States."
1. .456
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/isolate="OR 4724"
                                                                                                                                                                       /mol_type="genomic
/isolate="OR 4997"
                                                                                                                                                                                                                   /organism="Human papillomavirus"
/mol_type="genomic DNA"
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Pred. No. 0.3;
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HPU34123/c
                                                                                              ORIGIN
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TITLE
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and Jenison, S.A.
Human papillomavirus type 16 variant lineages in United States
populations characterized by nucleotide sequence analysis of the
B6, L2, and L1 coding segments
J. Virol. 69 (12), 7743-7753 (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                    Direct Submission
Submitted (16-AUG-1995) Andrew D. Farmer, Los Alamos National Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human papillomavirus
Human papillomavirus
Viruses; dabNA viruses, no RNA stage; Papillomaviridae;
unclassified Papillomaviridae.
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 1 CAGGACACAGTGGCTTTTGAC 21
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Yamada, T., Wheeler, C.M., Halpern, A.L., Stewart, A.C., Hildesheim, A.
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                                               Similarity
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                                Conservative
                                                                                                                          /codon_start=1
/product="eart; transforming protein E6"
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/db_xref="G1:1098752"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /translation="MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYD
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CINCQKPLCPEBKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                                                                               CINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                                                                                                                                                                                                                                                    /no\bar{t}e="collected by cervical lavage at Kaiser Permanente, Portland, Oregon, United States."
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/product="early transforming protein
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/potein_id="AAA9169.1"
/db_xref="GI:1098750"
                                                                                                                                                                                                                                                                           . .456
                                                                                                                                                                                                                                                                                                                                      organism="Human papillomavirus"
|mol_type="genomic_DNA"
|isolate="OR_5110"
                                                                                                                                                                                                                                                                                                                                                                                                     Jocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                L. .456
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                                                                                                                                                                                                                                             . 456
                                                                                                                                                                                                                                                                                                                         xref="taxon:10566"
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Pred.
                                               Score 21;
Pred. No.
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                                Mismatches
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                                                              DB 10;
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KEYWORDS
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HPU34125/c
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KEYWORDS
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Human papillomavirus
Human papillomavirus
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
unclassified Papillomaviridae.
1 (bases 1 to 456)
                                                                                                           456 bp DNA linear VRL 08-MAR-19:
Human papillomavirus type 16, isolate OR 6106, early transforming
protein E6 (E6) gene, complete cds.
                                                                                                                                                                                                                                                                                                           21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Submitted (16-AUG-1995) Andrew D. Farmer, Los Alamos National Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los Alamos, NM 87501, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human papillomavirus type 16 variant lineages in United States populations characterized by nucleotide sequence analysis of the E6, 12, and L1 coding segments
J. Virol. 69 (12), 7743-7753 (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 (bases 1 to 456)
Yamada, T., Wheeler, C.M., Halpern, A.L.,
and Jenison, S.A.
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                                                                                                                                                                                                                                                                             1 CAGGACACAGTGGCTTTTGAC 21
                                                                                                 U34125.1 GI:1098755
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Direct Submission
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                                                                                                                                                                                                                                                CAGGACACAGTGGCTTTTGAC
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                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                           /translation="MFQDFQERPRKLFQLCTELQTTIHEIILECVYCKQQLLRREVYD
FAFRDLCIVYRDGNFYAVCDKCLKFYSKISBYRHYCYSLYGTTLEQQYNKFLCDLLIR
CINCQKFLCFEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Portland, Oregon,
                                                                                                                                                                                                                                                                                                                                                                                                                                         /codon_start=1
/product="early transforming protein
/protein_id="AAA91671.1"
/db_xref="GI:1098754"
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/noTe="collected by cervical lavage at
Portland, Oregon, United States."
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         organism="Human papillomavirus"
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ORGANISM
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VERSION
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HPU34126/c
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Best Local S
Matches 21
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Parmer, A. D.

Direct Submission

Submitted (16-AUG-1995) Andrew D. F.

Laboratory, HIV Sequence Database,

Laboratory, MIV Sequence Database,

Laboratory, MIV Sequence Database,
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human papillomavirus type 16, isolate OR 6170, ear protein B6 (B6) gene, complete cds.
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Human papillomavirus type 16 variant lineages in United States populations characterized by nucleotide sequence analysis of the E6, L2, and L1 coding segments

J. Virol. 69 (12), 7743-7753 (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 CAGGACACAGTGGCTTTTGAC
                                                                            Submitted (16-AUG-1995) Andrew D. Laboratory, HIV Sequence Database, Alamos, NM 87501, USA
                                                                                                                                                                                                            Human papillomavirus type 16 variant lineages in United States populations characterized by nucleotide sequence analysis of the E6, L2, and L1 coding segments
J. virol. 69 (12), 7743-7753 (1995)
                                                                                                                                                                                                                                                                                                                                            Human papillomavirus
Human papillomavirus
Viruses; daBNA viruses, no RNA stage; Papillomaviridae;
unclassified Papillomaviridae.
                                                                                                                                Direct Submission
                                                                                                                                                                                                                                                                                                       1 (bases 1 to 456)
Yamada, T., Wheeler, C.M., Halpern, A.L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                         U34126.1 GI:1098757
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                                                                                                                                                     Farmer, A.D.
                                                                                                                                                                                                                                                                                         and Jenison, S.A.
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                                                                                                                                                                                                          Virol. 69 (12),
                                                                                                                                                                     (bases 1 to 456)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /gene="E6"
/gene="E6"
/codon_start=1
/product="early transforming protein E6"
/protein_ide"AAA91672.1"
/protein_ide"AAA91672.1"
/db_xref="G1:1098756"
/translation="MFQDPQERPTKLPDLCTELQTTIHDIILECVYCKQQLLRREVYD
/translation="MFQDPQERPTKLPDLCTELQTTHEQYTLEQQYMKPLCDLLIR
FAFRDLCIVYRDGNPYAVCDKCLKFYSKISEYRYYCYSLYGTTLEQQYMKPLCDLLIR
FINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTERETQL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /nore="collected by cervical lavage at Kaiser Permanente, Portland, Oregon, United States."
organism="Human papillomavirus"
/mol_type="genomic DNA"
                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /gene="E6"
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|mol type="genomic DNA"
|isolate="OR 6106"
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100.0%; Pred. No.
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, T-10, Mail Stop K710, Los
                                                                                              Farmer, Los
T-10, Mail
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Stop K7
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K710, Los
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VERSION
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HPU34127/c
LOCUS
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                                                                                                                                                                                                                                                                                                                                                        Submitted (16-AUG-1995) Andrew D. Farmer, Los Alamos National
Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los
Alamos, NM 87501, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human papiliomavirus type 16 variant lineages in United States populations characterized by nucleotide sequence analysis of the E6, L2, and L1 coding segments J. Virol. 69 (12), 7743-7753 (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human papillomavirus
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456 bp DNA linear VRL 08-MAR-19:
Human papillomavirus type 16, isolate OR 6311, early transforming
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Viruses; dsDNA viruses, no RNA stage; Papillomaviridae; unclassified Papillomaviridae.
                                                                                                                                                                                                                                                                                                                                                                                                                Farmer, A.D.
Direct Submission
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein E6 (E6) gene,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               and Jenison, S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Yamada, T., Wheeler, C.M., Halpern, A.L., Stewart, A.C., Hildesheim, A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 (bases 1 to 456)
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/product="early transforming protein E6"
/protein id="AAA91673.1"
/db_xref="GI:1098758"
/translation="MFODPQERFKLPQLCTELQTTIHDIILECVYCKQQLLRREVYD FAFRDLCIVYEDGNYYXCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKFLCDLLIR CINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
/codon_start=1
/product="early transforming protein E6"
/protein id="AAA91674.1"
/db_xref="GI:1098760"
/translation="MFGDPQERPKLPQLCTELQTTIHDIILECVYCKQQLLRREVYD
FAFRDLCIVERGONYAYCDKCLKFYSKISBYRHYCYSVYGTTLEQQYNKPLCDLLIR
CINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note="collected by cervical lavage at Kaiser Permanente,
Portland, Oregon, United States."
1...456
                                                                                                                                                                                                     Portland, Oregon,
                                                                                                                                                                                                       /noīe="collected by cervical lavage at Kaiser Permanente,
Portland, Oregon, United States."
                                                                                                                                                                                                                                                               /mol_type="genomic
/isoTate="OR 6311"
                                                                                                                                                                                                                                                                                                                         1. .456
                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                               gene="E6"
                                                                                                                                                                gene="E6"
                                                                                                                                                                                                                                               db xref="taxon:10566"
                                                                                                                                                                                                                                                                                                    organism="Human papillomavirus"
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Pred. No.
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HPU34129/c
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HPU34128/c
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Best Local S
Matches 21
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Best Local (
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U34129
U34129.1 G:
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J. Virol. 69 (12),
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456 bp DNA linear VRL 08-MAR-199
Human papillomavirus type 16, isolate OR 7145, early transforming
protein E6 (E6) gene, complete cds.
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                                       Human papillomavirus type 16, isola protein E6 (E6) gene, complete cds.
                                                                         HPU34129
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human papillomavirus type 16 variant lineages in populations characterized by nucleotide sequence E6, L2, and L1 coding segments J. Virol. 69 (12), 7743-7753 (1995)
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1 (bases 1 to 456)
Yamada,T., Wheeler,C.M., Halpern,A.L.,
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                                                                                                                                                                                                               Conservative
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                                                                                                                                                                                                                                                                                                     /product="early transforming protein E6"
(protein id="AAA91675.1"
/db.xref="G1:1098762"
/translation="MFQDPQERPIKLPDLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIYYRDGNPYAVCDKCLKFYSKISEYRYYCYSLYGTTLEQQYNKPLCDLLIR
               GI:1098763
                                                                                                                                                                                                                                                                                          CINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
                                                                                                                                                                                                                                                                                                                                                                                  gene="E6"
codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                              'gene="E6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Portland, Oregon,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                /db xref="taxon:10566"
/note="collected by cervical lavage at Kaiser Permanente,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         organism="Human papillomavirus"
|mol type="genomic DNA"
|isolate="OR 7145"
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100.0%; Pred. No.
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                                                                                                                                                                                                                             Score 21;
Pred. No.
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                                                                                                                                                                                                               Mismatches
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                                                       456 bp DNA linear VRL 08-MAR-1996
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, T-10, Mail Stop K710, Los
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TITLE
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456 bp
Human papillomavirus type 16, isola
protein 86 (86) gene, complete cds.
                                                                              E6, L2, and ___
J. Virol. 69 (12),
                                                                                       Human papiliomavirus type 16 variant lineages in United States populations characterized by nucleotide sequence analysis of tl B6, L2, and L1 coding segments J. Virol. 69 (12), 7743-7753 (1995)
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Laboratory, HIV Sequence
Alamos, NM 87501, USA
Submitted (16-AUG-1995) Andrew D. Farmer, Los Alamos National Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los
                                                                                                                                                                                                                            Human papillomavirus
Human papillomavirus
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J. Vicol. 69 (12), 7743-7753 (1995)
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Yamada, T., Wheeler, C.M., Halpern, A.L.,
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                              Direct Submission
                                                                                                                                                    and Jenison, S.A.
                                                                                                                                                                 1 (bases 1 to 456)
Yamada, T., Wheeler, C.M., Halpern, A.L., Stewart, A.C., Hildesheim, A.
                                                                                                                                                                                               Viruses; dsDNA viruses, no RNA stage; Papillomaviridae; unclassified Papillomaviridae.
                                                                                                                                                                                                                                                                            U34130.1 GI:1098765
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                                                         (bases 1 to 456)
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PAFRDLCIVYRDGNPYAVCDKCLKFYSKISBYRHYCYSLYGTTLBQQYNKPLCDLLIR
CINCQKPLCPBBKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"
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1. .456
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/product="early transforming protein
/protein_id="AAA91676.1"
/db_xref="GI:1098764"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /db xref="taxon:10566"
/note="collected by cervical lavage
Portland, Oregon, United States."
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Human papillomavirus type 16, isolate OR 7632, early transforming
protein E6 (E6) gene, complete cds.
U34131
                                                                                                                                                                                                                                                                                                      Submitted (16-AUG-1995) Andrew D. Farmer, Los Alamos National Laboratory, HIV Sequence Database, T-10, Mail Stop K710, Los Alamos, NM 87501, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                     1 (bases 1 to 456)
Yamada, T., Wheeler, C.M., Halpern, A.L., Stewart, A.C., Hildesheim, A. and Jenison, S.A.
and Jenison, S.A.
Human papillomavirus type 16 variant lineages in United States populations characterized by nucleotide sequence analysis of the E6, L2, and L1 coding segments
E6, L2, and L1 coding segments
L2, Virol. 69 (12), 7743-7753 (1995)
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Human papillomavirus
Viruses, dapNA viruses, no RNA stage; Papillomaviridae;
unclassified Papillomaviridae.
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Portland, Oregon, United States."
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/translation="MFQDPQERPTKLPDLCTELQTTIHDIILECVYCKQQLLRREVYD FAFRDLCIVYRDGNPYAVCDKCLKFYSKISEYRYYCYSLYGTTLEQQYNKPLCDLLIR CINCQKPLCPEEKQRHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL"

Query Match 100.0%; Score 21; DB 10; Length 456; Best Local Similarity 100.0%; Pred. No. 0.3; Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps

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Search completed: May 24, 2006, 06:54:50 Job time: 698.284 secs

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Carter, N.M.
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Gen-Probe Incorporated; San Diego, CA
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AC079049 Homo sapi
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AC027295 Homo sapi
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US 6583278-A 124 24-JUN-2003;
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Rolfe, M., Chiu, M. Isabel.,
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Draetta,G., Rolfe,M. and Eckstein,J.
Human ubiquitin conjugating enzyme
Patent: US 5981699-A 9 09-NOV-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 476;
                                                                            Length 476;
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                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
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AUTHORS
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AUTHORS
TITLE
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PAHPV181
LOCUS
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KEYWORDS
SOURCE
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CS113238
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CS113238
CS113238.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Milner,A.J.
Colloidal delivery system for biological Patent: WO 2005051431-A 15 09-JUN-2005;
Milner, Anne Josephine (GB)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAHFVIBL 528 bp DNA linear VRI
Integrated HPV-18 E6/E7 ORF with DNaseI-hypersensitive
X05568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human papillomavirus - 18
Human papillomavirus - 18
Viruses; dsDNA viruses, no
                                                                                                                                                                                                                                                                                          Structure, DNaseI hypersensitivity and expression papilloma virus in the genome of HeLa cells Eur. J. Biochem. 165 (2), 393-401 (1987)
                                                                                                                                                                                                                                                                                                                                                             Human papillomavirus
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
unclassified Papillomaviridae.
                                                                                                                                                                                                                                                                                                                                                                                                                X05568.1 GI:60880

DNase I hypersensitive site; sequence; inverted repeat.
                                                                                                                                                                                                                                      numbering refers to the Xba site in E6
Data kindly reviewed (12.2.88) by Lazo
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                     Human papillomavirus
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                                                                                                     complement (34.
                                                                                                                                                                      /organism="Human papillomavirus"
|mol type="genomic DNA"
|db xref="taxon:10566"
|cell_line="Hela"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Human papillomavirus
/mol_type="unassigned DNA"
/db_xref="taxon:337042"
                                                                                                                   /note="inverted repeat A"
               /note="inverted repeat B'"
                                                                  /note="inverted
                                                                                                                                               note="enhancer-like sequence
                                        'note="enhancer-like sequence
                                                                                           'note="enhancer-like sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      from Patent W02005051431.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 32; DB 2; L
Pred. No. 0.0031;
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VRL 06-JUL-1989

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Length 477;

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REFERENCE
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ORGANISM
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A98759
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ORGANISM
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KEYWORDS
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Sequence
A98759
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188814
                                  unidentified unclassified sequences.
1 (bases 1 to 837)
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Boursnell, M.E., Inglis, S.C. and Munro, A.J.
Recombinant virus vectors encoding human p
Patent: US 5719054-A 11 17-FEB-1998;
Location/Qualifiers
                                                                          unidentified
                                                                                                 A98759.1 GI:6781783
                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown
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                                                                                                                                                                                                                                                                                                                                                                                                              Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
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                         Lombardo-Bencheikh, A. and Bruck, C.
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32; Conservative
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                                                                                                                                                                                                                   TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 32
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                                                                                                                                                                                                                                                100.0%; Score 32; DB 2; ilarity 100.0%; Pred. No. 0.0029; Conservative 0; Mismatches (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note="enhancer-like sequence 9"
complement (453. .460)
/note="enhancer-like sequence 10"
complement (460. .466)
/note="enhancer-like sequence 11"
complement (470. .477)
/note="enhancer-like sequence 12"
 WO 9910375-A 20 04-MAR-1999;
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139. .145
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435. .442
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                                                                                                                                                                                                                                                                                                             /mol_type="unassigned
                                                                                                                                                                                                                                                                                                                                         1. .817
                                                                                                                                                                                                                                                                                                                                                                                                                                                               GI:3408754
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164. .171
                                                                                                                                                                                                                                                                                                                         organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         note="enhancer-like sequence
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100.0%; Pred. No.
tive 0; Mismatch
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WO9910375.
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US 5719054.
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                                                                                                                                       linear
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                                                                                                                                       PAT 26-JAN-2000
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SOURCE
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ACCESSION
                                     RESULT 12
BD103169
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AUTHORS
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DEFINITION
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Best Local S
Matches 32
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                                                                                                                                                  Best Local
                                                                                                                                                            Query Match
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 BD103169
Vaccine.
BD103169
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LAUDINE BRUCK, TERESA CABEZON SILVA, ANNE MARIE EVA FERNANDE
PI DELISSE,
PI CATHERINE MARIE GHISLAINE GERARD, ANGELA LOMBARDO BENCHEIKH PC
C12N15/09, A61K9/107, A61K39/12, A61K39/145, A61K39/39, A61P35/00, PC
A61P37/00,
PC C07K14/025, C07K19/00, C12N1/15, C12N1/19, C12N1/21, C12N5/00,
PC C12N15/00, C12N5/00
CC Vaccine
FH Key
FT Bource
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patent: JP 2001513986-A 10 11-SEP-2001;
SMITHKLINE BEECHAM BIOLOGICALS SA
OS Homo sapiens (human)
PU 2001513986-A/10
PD 11-SEP-2001
PF 17-AUG-1998 JP 2000507701
PF 17-AUG-1997 GB 9717953.5
PI CLAUDINE BRUCK, TERESA CABEZON SILVA, A:
PI DELISSE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     634 TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 665
                                                                                                  1 TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BD080320.1 GI:22625
JP 2001513986-A/10.
Homo sapiens (human)
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Bruck, C., Silva, T.C.,
Bencheikh, A.L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOMBARDO BENCHEIKH ANGELA (BB); SMITHKLINE BEECHAM BIOLOG (BB)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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                                                                                                                                                 100.0%; ilarity 100.0%; Conservative 0
                                                                                                                                                                                                                                                                                                   /organism='Homo sapiens
                                                                                                                                                                                                                                /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
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                                                                                                                                                 Score 32; DB 2; Pred. No. 0.0029; Mismatches
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 PAT 27-AUG-2002
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AR183581
LOCUS
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py JP 2001527091-A/10
pD 25-DBC-2001
pF 18-DBC-1998 JP 2000526542
pF 18-DBC-1998 JP 2000526542
pF 24-DBC-1997 GB 9727262.9
pI WILFRIED L J DALEMANS, CATHERINE MARIE GHISLAINE GERARD PC C07K14/025, A61K39/00, A61K39/12, A61K39/385, A61P35/00, C07K19/00, PC C12N15/09
pC C12N15/09
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  634
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Bruck, C., Silva, T. Cabezon., Fernande Delisse, A.-M. Eva.,
Gerard, C. Marie. and Lombardo-Bencheikh, A.
Recombinant papillomavirus vaccine and method for produc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20
AR183581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown
                                                                                                                                                                                                                                                                                                             Patent: US 6342224-A 20 29-JAN-2002;
Location/Qualifiers
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1 (bases 1 to 837)
Dalemans, W.L.J. and Gerard, C.M.G
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                                                 TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 32
TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 665
                                                                                                      Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                         1. .837
                                                                                                                                                                                                                                  /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                              organism="unknown"
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tive 0;
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Pred. No. 0.0029;
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Pred. No. 0.0029;
Mismatches 0
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E6 gene; E6 protein; E7 gene; E7 protein.
Human papillomavirus type 18
Human papillomavirus type 18
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
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                                                                                                                                                                                                                                                                                                   Submitted (02-DEC-1998) V.P. Veiko, Ins
Selection of Industrial Microorganisms,
Moscow 113545, RUSSIA
                                                                                                                                                                                                                                                                                                                                                                                   Cloning of E6 and E7 Genes of Human Papilloma Virus Type 18 and Transformation Potential of E7 Gene and its Mutants Virus Genes 182, 139-149 (1999)
2 (bases 1 to 843)
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Laassri, M., Gul'ko, L., Vinokurova, S., Kisseljova, N., Veiko, V. and Kisseljev, F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Patent: WO 9933868-A 20 08-JUL-1999;
DALEMANS WILFRIED L J (BE); SMITHKLINE
CATHERINE MARIE GHISLAI (BE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human papillomavirus
Viruses; dsDNA viruses, no RNA
unclassified Papillomaviridae.
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Sequence 20 from Patent
AX020943
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/gene="E6"
/gene="E6"
/codon_start=1
/product="E6 protein"
/protein_id="CAB53096.1"
/protein_id="CAB53096.1"
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/db_xref="G0A:090RP8"
/db_xref="UniProtKB/TrEMBL:090NP8"
/db_xref="UniProtKB/TrEMBL:090NP8"
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                                                                                                                                                                                                            /organism="Human papillomavirus
/mol_type="genomic DNA"
/db_xref="taxon:333761"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Human papillomavirus"
/mol_type="unassigned DNA"
/db_xref="taxon:10566"
                                                                                                                                                                     40. .516
                                                                                                                                                                                 gene="E6"
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912 bp DNA linear VRL 02-AUG-1993
Human papillomavirus type 18 encoding envelope proteins E6 and E7,
complete cds., and envelope protein E1, 5' end.
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Human papillomavirus
Human papillomavirus
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Schneider-Gadicke,A. and Schwarz,E.
Different human cervical carcinoma cell lines show similar transcription patterns of human papillomavirus type 18 early genes EMBO J. 5 (9), 2285-2292 (1986)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      inal source text: Human papillomavirus type 18, cDNA to mRNA,
human cervical carcinoma HeLa, C4-1 and SW756 cell lines.
Location/Qualifiers
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525. .842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /gene="E7"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 note="ORF E6"
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ВB
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10;
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Length 912;
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Amplified spliced mRNA for HPV 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Oltersdorf,T., Roewekamp,W., Schneider-Gaedicke,A., Seedorf,K., Duerst,M. and Schwarz,E.

Expression products of human papilloma virus type 18, antibodies specific for these proteins, and disgnostic reagents containing these antibodies or the corresponding DNA Patent: EP 0256321-A 5 24-FEB-1988;

BEHRINGWERKE Aktiengesellschaft Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human papillomavirus type 18
Human papillomavirus type 18
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
Alphapapillomavirus.
1 (bases 1 to 1000)
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El gene;
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Hpv18 |
A06328
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Human papillomavirus type 18"
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/db_xref="UniProtKB/Swiss-Prot:P06463"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           codon start=1
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Sequence 22 from Patent
A98761
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                                                                                          JP 2001513986-A/11.
Homo sapiens (human)
Homo sapiens
                                                                                                                                      Vaccine.
BD080321
BD080321.1 GI:22625924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cerutti,P., Whitcomb,J., Zijlstra,J. and Detection of human papillomavirus DNA in Patent: EP 0373152-A 7 20-JUN-1990; BEHRINGWERKE Aktiengesellschaft
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  synthetic construct other sequences, artificial sequences.

1 (bases 1 to 1000)
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A07621.1 GI:413119
Hominidae; Homo.

1 (bases 1 to 1152)

Bruck,C., Silva,T.C.,

Bencheikh,A.L.
                                                                                                                                                                                      BD080321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      unclassified sequences.
1 (bases 1 to 1152)
Lombardo-Bencheikh, A. and Bruck, C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A98761.1 GI:6781784
                                                            Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patent: WO 9910375-A 22 04-MAR-1999;
LOMBARDO BENCHEIKH ANGELA (BE); SMITHKLINE
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100.0%; Pred. No. 0.0028;
tive 0; Mismatches 0
                                                            Chordata; Craniata; Vertebrata; Euteleostomi; Euarchontoglires; Primates; Catarrhini;
              Delisse, A.M.E.F.,
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Pred. No. 0.0028;
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: WO9910375.
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                Gerard, C.M.G.
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BD103170
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Best Local Similarity 100.0%; Pred. No. 0.0028;
Matches 32; Conservative 0; Mismatches 0.
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                                                                                                       PAL PATENT: JP 2001527091-A 11 25-DEC-2001;

SMITHKLINE BEECHAM BIOLOGICALS SA

OS Unidentified
PN JP 2001527091-A/11
PD 25-DEC-2001
PF 18-DEC-1998 JP 2000526542
PF 18-DEC-1997 GB 9727262-9
PI WILFRIED L J DALEMANS, CATHERINE MARIE GHISLAINE GERARD PC C07K14/025, A61K39/00, A61K39/12, A61K39/385, A61P35/00, C07K19/00, PC C12N15/09
CC C12N15/09
CC C12N15/00
CC Strandedness: Single;
CC Topology: Linear;
CC Vaccine
FH Key
I Location/Qualifiers
FT Source
//organism='Unidentified'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Patent: JP 2001513986-A 11 11-SEP-2001;
SMITHKLINE BEECHAM BIOLOGICALS SA
OS Homo sapiens (human)
PN JP 2001513986-A/11
PD 11-SEP-2001
PF 17-AUG-1998 JP 2000507701
PR 22-AUG-1997 GB 9717953.5
PI CLAUDINE BRUCK, TERESA CABEZON SILVA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A61P37/00,
PC C07K1-
C12P21/02,
PC C12N1-
CC Vacci
FH Key
FT Source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Vaccine.
BD103170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 32
                                                                                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 1152)
Dalemans, W.L.J. and Gerard, C.M.G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                               unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BD103170.1 GI:22648744
JP 2001527091-A/11.
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                                                                                                                                                                                                                                                                                                                                                                                                                                unclassified sequences.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 665
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism='Homo sapiens (human)'.
Location/Qualifiers
1...1152
                                                                                            /organism='Unidentified'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
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                             /organism="unidentified"
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PAT 27-AUG-2002

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AUTHORS
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SOURCE
ORGANISM
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ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
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AX020945
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ACCESSION
VERSION
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Best Local S
Matches 32
                                                 Query Match
Best Local Similarity
Matches 32; Conserv
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Sequence
AR183582
                                                                                                                                                                                                                                                      Human papillomavirus
Human papillomavirus
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
unclassified Papillomaviridae.
                                                                                                                                                                                                                                                                                                                                     AX020945
Sequence 22 from Patent
AX020945
                                                                                                                                                                             Patent: WO 9933868-A 22 08-JUL-1999;
DALEMANS WILFRIED L J (BE); SMITHKLINE BEECHAM BIOLOG (BE); GERARD CATHERINE MARIE GHISLAI (BE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 (bases 1 to 1152)
Bruck, C., Silva, T. Cabezon., Fernande Delisse, A.-M. Eva., Ghislaine Gerard, C. Marie. and Lombardo-Bencheikh, A.
Recombinant papillomavirus vaccine and method for production and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                Dalemans, W.L. and Gerard, C.M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Patent: US 6342224-A 22 29-JAN-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unclassified.
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             TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 32
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TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 665
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22
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                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="unknown"
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                                                100.0%; Score 32; DB 2;
100.0%; Pred. No. 0.0028;
tive 0; Mismatches 0
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W09933868.
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US 6342224.
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TITLE
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AUTHORS
TITLE
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SOURCE
ORGANISM
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854157
LOCUS
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ACCESSION
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ACCESSION
VERSION
KEYWORDS
SOURCE
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 source
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Query Match
Best Local Similarity
                                                                                                                                                                                                                                 unclassified sequences.

It (bases 1 to 1188)

I (bases 1 to 1188)

I (bases 1 to 1188)

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I (base
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PN UP 2001197894-A/1
PD 24-JUL-2001
PD 24-JUL-2000 JP 2000379281
PF 13-DEC-2000 JP 2000379281
PF 13-DEC-2000 JP 2000379281
PR 26-FEB-1987 AU PI0559
PR 26-FEB-1987 AU PI0559
PR 26-FEB-1987 AU PI0559
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PR 26
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1 (bases 1 to 1188)

1 (bases 1 to 1188)

Morris, B.J. and Nightingale, B.

Method for detecting human carcinogenic papilloma virus

Patent: JP 2001197894-A 1 24-JUL-2001;

BIOSEARCH INTERNATIONAL PTY LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
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JP 2001197894-A/
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Method for detecting human carcinogenic papilloma virus.
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                                                                                                                                                                 /organism='Papilloma virus'.
Location/Qualifiers
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Pred. No. 0.0028;
); Mismatches 0
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an carcinogenic papilloma
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virus HPV18.
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                                                                                                                                                                                                                     610
                                  A06324.1 GI:413669
E1 Gene; E6 Gene; E7 gene.
Human papillomavirus type 18
Human papillomavirus type 18
Viruses; dsDNA viruses, no RNA s
Alphapapillomavirus.
1 (bases 1 to 1750)
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Human papillomavirus
Viruses; dsDNA viruses, no RNA
unclassified Papillomaviridae.
              Oltersdorf, T., Roewekamp, W., Duerst, M. and Schwarz, E.
                                                                                                                              Hpv18 genes for A06324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The expression of human papillomavirus type 18 E6 protein bacteria and the production of anti-E6 antibodies J. Gen. Virol. 67 (Pt 9), 1909-1916 (1986)
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32; Conserv
 Expression products of human
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Matlashewski,G., Banks,L., Wu-Liao,J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    transforming capacity; unidentified reading
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    X04354.1
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                                                                                                                                                                                                                                                                    100.0%;
llarity 100.0%;
Conservative 0
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                                                                                                                                                                                                                                                                                                                                              /db_xref="GOA:P06463"
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/translation="MARFEDPTRRPYKLPDLCTELNTSLQDIBITCVYCKTVLELTEV
FEFAFKDLFVVYRDSIPHAACHKCIDFYSRIRELRHYSDSVYGDTLEKLTNTGLYNLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                   !RCLRCQKPLNPAEKLRHLNEKRRFHNIAGHYRGQCHSCCNRARQERLQRRRETQV"
                                                                                                                                                                                                                                                                                                                                                                                                   /protein_id="CAA27879.1"
/db_xref="GI:60996"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="genomic DNA"
/strain="type 18"
/db_xref="taxon:10566"
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                                                                                                                                                                                                                                                                                                                                                                                                                                          note="unnamed protein product; E6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     organism="Human papillomavirus"
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(HPV-18) E6
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Pred. No. 0.0028;
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and E
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Mismatches (
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dp
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 papilloma
                        Schneider-Gaedicke, A., Seedorf, K.,
                                                             stage;
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                                                                                                                                                     DNA
                                                             Papillomaviridae;
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virus type 18, antibodies
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VERSION
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PAHPV18E
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                         Data
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Human papillomavirus
Viruses; dsDNA viruses, no RNA stage; Papil
unclassified Papillomaviridae.

1 (bases 1 to 1750)
Seedorf,K., Olteredorf,T., Krammer,G. and R
Identification of early proteins of the hum
type 16 (HPV 16) and type 18 (HPV 18) in ce
EMBO J. 6 (1), 139-144 (1987)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                418 TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 449
                                                                                                                                                                                                                                                                                                                                                                                               Human papilloma virus proteins E6, E7, E1.
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                                                                                                                                                                                                                                                                                                                           unidentified reading
                                                                                                                                                                                                                                                                                                                                                   X04773.1 GI:60876
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 32
kindly reviewed (31-OCT-1987)
Location/Qualifiers
1. .1750
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /codon_start=1
/product="E1"
/protein_id="CAR00541.1"
/db_xref="GI:413672"
/db_xref="GOR:QB4181"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /db_xref="Uniptoks/Trembl:Q84181"
/db_xref="Uniptoks/Trembl:Q84181"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /db_xref="UniProtKB/Swiss-Prot:P06788"
/translation="MHGPKATLQDIVLHLEPQNEIPVDLLCHEQLSDSEEENDEIDGV
NHQHLPARRAEPQRHTMLCMCCKCEARIELVVESSADDLRAFQQLFLNTLSFVCPWCA
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FBFAFKDLFVVYRDSIPHAACHKCIDFYSRIRELRHYSDSVYGDTLEKLTNTGLYNLL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /protein_id="CAA00540.1"
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/db_xref="GOA:P06788"
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/db_xref="GI:413670"
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100.0%; Pred. No. 0.0027;
tive 0; Mismatches (
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type 18
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dq '
                                               by SEEDORF
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                                                                                                                      and Rowekamp, W.
he human papilloma viruses
in cervical carcinoma cel
                                                                                                                                                                                                                                                 Papillomaviridae;
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Matches 32
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        418
                                                                                                                                                               protein E1; protein E6; protein E7.
Human papillomavirus type 18
Human papillomavirus type 18
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
Alphapapillomavirus.
1 (bases 1 to 315)
                                                                                                                                                                                                                                                                                                                  HUMHELB 3135 bp mR)
Human papillomavirus type 18 proteins
cds, and protein E1, 5' end.
                                                                                         Inagaki,Y., Tsunokawa,Y., Takebe,N., Nawa,H., Nakanishi,S.,
Terada,M. and Sugimura,T.
Nucleotide sequences of CDNAs for human papillomavirus type
transcripts in HeLa cells
                                      The
                                                                                                                                                                                                                                                                                  M20325.1 GI:183936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 32
                                                                        Virol.
                   integrated viral sequence starts at position 1. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /COGON_Start=1
/COGON_Start=1
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/db_xref="GGA:Q84181"
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LEVDTELSPRIQEISLNSGQKKAKRILFTISDSGYGCSEVERTQIQVTTNGEHGGNVC
SGGSTEAIDNGGTEGNNSSVDGTSDNSNIENVHQCTIAGALKDLLKVNKKGGAMLAVF
SGGSTEAIDNGGTEGNNSSVDGTSDNSNIENVHQCTIAGAFKTLIOPFILYAHIQCL"
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NHQHLPARRAEPQRHTMLCMCCKCEARIELVVESSADDLRAFQQLFLNTLSFVCPWCA
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/translation="warfeddTrrpyklpdlcTelnyslqdieitcvycktyleitev
fefapkdlfvyyrdsiphaachkcidfysrirelrhysdsvygdtlekltntglynll
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /proteIn_id="CAA28467.1"
/db_xref="GI:60878"
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/db_xref="GI:60877"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /db_xref="taxon:10566"
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/mol_type="genomic DNA"
                                                                          62 (5), 1640-1646 (1988)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | RCLRCQKPLNPAEKLRHLNEKRRFHNI AGHYRGQCHSCCNRARQERLQRRRETQV"
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Pred. No.
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0.0027;
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                                                                                                             papillomavirus type
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and E7 mRNA,
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Cole, S.T. and Danos, O. Nucleotide sequence an
                                                                                                                                                                                                                                                               U89349.1 GI:2052453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
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                               (bases 1 to 5210)
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/db_xref="GI:306836"
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/clone="125"
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Human papillomavirus type 18 variant, U89349
                                                                                                                    Alphapapillomavirus.

1 (bases 2216 to 2355; 2538 to 3127)
Schneider-Gadicke,A. and Schwarz,E.
Different human cervical carcinoma cell lines show similar transcription patterns of human papillomavirus type 18 ear.
EMBO J. 5 (9), 2285-2292 (1986)
                                                                                                                                                                                                                                                                                                      Human papillomavirus type 18
Human papillomavirus type 18
Viruses; dsNNA viruses, no RNA stage;
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/product="protein_B1"
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QFLRYQQIEFITFLGALKSFLKGTFKKNCLVFCGPANTGKSYFGMSFIHFIQGAVISF
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/translation="MMGPKATLQDIVLHLEPQNEIPVDLLCHEQLSDSEEENDEIDGV
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fefafkdlfvvyrdsiphaachkcidfysrirelrhysdsvygdtlekltntglynll
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/mol_type="mRNA"
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and comparative analysis
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Pred. No. 0.0025;
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Evolution of human papillomavirus type 18: an ancient phylogenet root in Africa and intratype diversity reflect coevolution with
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Submitted (10-FEB-1997) VEHB,
Prevention, 1600 Clifton Road
Location/Qualifiers
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J. Gen. Virol. 80 (Pt 7),
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Nucleotide sequences and further characterization papillomavirus DNA present in the CaSki, SiHa and
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Ong,C.K., Chan,S.Y., Campo,M.S., Fujinaga,K., Mavromara-Nazos,P.,
Labropoulou,V., Pfister,H., Tay,S.K., ter Meulen,J., Villa,L.L. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Terada,M. and Sugimura,T.
Nucleotide sequences of cDNAs for human papillomavirus type 18
transcripts in HeLa cells
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Number X05015"
/citation=[2]
/replace="c"
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666
/replace="t"
2291
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Number X55015"
/citation=[2]
/replace="c"
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1935
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/replace="c"
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/mol_type="genomic DNA"
/strain="type 18 variant"
/db_xref="taxon:333761"
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HeLa cervical
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Sequence 2 from Patent WO20050333333.
CS073239
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Lusk, J., Lindberg, M. and Yoast, S.
Methods and compositions for the diagnosis of
Patent: WO 2005033333-A 2 14-APR-2005;
DakoCytomation Denmark A/S (DK)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                          Similarity
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                                             TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 32
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                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /citation=[2]
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2607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /replace="t"
4391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note="see HPV-18
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2873
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}929
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                                                                                          100.0%;
                                                                           0,
                                                                                          Score 32; DB 2;
Pred. No. 0.0023;
                                                                             Mismatches
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                                                                                                        Length 7857;
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                                                                             Indels
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ORGANISM
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AY262282
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Human papillomavirus type 18
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chen,
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AY262282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Submitted (25-MAR-2003) Microbiology and Immunology, Albert
Einstein College of Medicine of Yeshiva University, 1300 Mo
Park Ave., Ullmann S15, Bronx, NY 10461, USA
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3 (bases 1 to 7857)
Burk, R.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unpublished
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J. Virol. 79 (24), 15503-15510 (2005)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Narechania, A., Chen, Z., De
Phylogenetic Incongruence
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n, Z. and Burk, R.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (bases 1 to 7857)
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7), with E6, E7, E1,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene="E6"
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ce among Oncogenic Genital Alpha Human
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VERSION
KEYWORDS
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PAPHPV18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nucleotide sequence and comparative analysis of the human papillomavirus type 18 genome. Phylogeny of papillomaviruses and repeated structure of the B6 and E7 gene products J. Mol. Biol. 193 (4), 599-608 (1987)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           El gene; E2 gene; E5 gene; E6 gene; E7 gene; L1 gene; L
Human papillomavirus type 18
Human papillomavirus type 18
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human papillomavirus type X05015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cole, S.T. and Danos, O.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alphapapillomavirus.
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Pred. No. 0.0023;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18 E6,
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, E7, E1,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
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, L1 & L2 genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0,
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HPV45E6E7
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Human papillomavirus type 45
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
                                                                                                                                                                                                                                                                                                                                            Submitted (09-MAY-1997) M. Favre, In Rue du Dr Roux, 75015-Paris, FRANCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Saxtre-Garau, X., Favre, M., Couturier, J. and Orth, G. Distinct patterns of alteration of myc genes associated integration of HPV16 or HPV45 DNA in two genital tumors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Y13218.1 GI:2113839
E6 gene; E7 gene.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          papillomavirus type
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/gene="L1"
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100.0%; Pred. No. 0.0
tive 0; Mismatches
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, E6 and E7 genes.
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PPH45E67A
LOCUS
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'
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Human papillomavirus
Viruses; dsDNA viruse
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Kaplan, J.B. and Burk, R.D.
Evolution of the papillomaviruses
Unpublished (1990)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human papillomavirus type
M38198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            viruses; dsDNA viruses, no RNA stage;
unclassified Papillomaviridae.
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587. .907
                                                                                                                                                                                                                                                                                                                                                                                                                          River, NY 10965.
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                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
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                                                                                                                      gene="E7"
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E7
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HPV45
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Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Direct Submission
Submitted (06-AUG-1993) H. Delius, Deutsches
Krebsforschungszentrum, Abteilung ATV, Im Neuenheimer Feld 506,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alphaparature (1858)

1 (bases 1 to 7858)

Delius, H. and Hofmann, B.

Primer-directed sequencing of human papillomavirus types

Primer— Microbiol. Immunol. 186, 13-31 (1994)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                El gene; E2 gene; E4 gene; E6 gene; E7 gene; early protegene; L2 gene; late protein.

Human papillomavirus type 45

Human papillomavirus type 45

Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
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Human
X74479
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JOURNAL
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TITLE
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AUTHORS
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ORGANISM
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VERSION
KEYWORDS
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HSA242956
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Best Local Similarity
Matches 31; Conserv
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El fusion protein; Eprotein; Eprotein; HPV45 El gene; HPV45 E7 gene; HPV45 L2 gene; lprotein; N-myc gene; N-myc protein.
Homo saplens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Submitted (08-JUN-1999) Favre M.G., Virology, Pasteur Institute, 25, rue du Docteur Roux, 75015 Paris, FRANCE Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
HPV45 E7 and
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J. Gen. Virol. 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sastre-Garau, X., Favre, M., Couturier, J. and Orth, G. Distinct patterns of alteration of myc genes associated with integration of human papillomavirus type 16 oe type 45 in two integration of human papillomavirus type 16 oe type 45 in two integrations of human papillomavirus type 16 oe type 45 in two integrations of human papillomavirus type 16 oe type 45 in two integrations of human papillomavirus type 16 oe type 45 in two integrations of human papillomavirus type 16 oe type 45 in two integrations of human papillomavirus type 16 oe type 45 in two integrations of human papillomavirus type 16 oe type 45 in two integrations of human papillomavirus type 16 oe type 45 in two integrations of human papillomavirus type 16 oe type 45 in two integrations of human papillomavirus type 16 oe type 45 in two integrations of human papillomavirus type 16 oe type 45 in two integrations of human papillomavirus type 16 oe type 45 in two integrations of human papillomavirus type 16 oe type 45 in two integrations of human papillomavirus type 16 oe type 45 in two integrations of human papillomavirus type 16 oe type 45 in two integrations of human papillomavirus type 16 oe type 45 in two integrations of human papillomavirus type 16 oe type 45 in two integrations of human papillomavirus type 16 oe type 45 in two integrations of human papillomavirus type 16 oe type 45 in two integrations of human papillomavirus type 16 oe type 45 in two integrations of human papillomavirus type 16 oe type 45 in two integrations of human papillomavirus type 16 oe type 45 in two integrations of human papillomavirus type 16 oe type 45 in two integrations of human papillomavirus type 16 oe type 45 in two integrations of human papillomavirus type 16 oe type 45 in two integrations of human papillomavirus type 16 oe type 45 in two integrations of human papillomavirus type 16 oe type 45 in two integrations of human papillomavirus type 16 oe type 45 in two integrations of human papillomavirus type 16 oe type 45 in two integrations of human papillomavirus type
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HSA242956
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                                                                                                                                                                                                                                                                                                                  /gene="N-myc"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  YSRHVEEYDLQPIFQLCTITLTAEVMSYIHSMNSSILENWNFGVPPPPTTTSLVDTYRF
VQSVAVTCQKDTTPPEKQDPYDKLKFWTVDLKEKFSSDLDQYPLGRKFLVQAGLRRRP
TIGPRKRPAASTSTASRPAKRVRIRSKK"
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LFNKPYWLHKAQGHNNGICWHNQLFVTVVDTTRSTNLTLCASTQNPVPSTYDPTKFKQ
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KAKSLSPRNSDSEDSERRRNHNILERGQRNUDLRSSFITLBHVPELVKNEKAAKVVIL
KKATEYVHSLQAEEHQLLLSKEKLQARQQQLLKKIBHARTC"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <1819. .2424
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<3295. .3804
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /gene="N-myc"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           organism="Homo sapiens"
/gene="HPV45 L2"
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partial N-myc (exon 3), HPV45 L2, HPV45 L1, HPV45 E6,
HPV45 E1 genes isolated from IC4 cervical carcinoma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    95.0%;
96.9%;
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                                                                                 .3804
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Pred. No. 0.
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l1 protein; I
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3707. .5317
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /gene="HPV45 E6"
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                                                                                                                                                                                                                                                                                                                        /gene="HPV45 E1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       db_xref="GOA:Q9Y4Y3"
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                                                                                                                                                                                                  protein"
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RESULT 39
BC056907
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AUTHORS
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KEYWORDS
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Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
Sciurognathi; Muroidea; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MUSRP 886 bp mI Mus musculus ribosomal protein mRNA,
                                                                                                                                                                                        Homo sapiens cDNA clone
BC056907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Original
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Zheng, Y.-M., Su, P., Wang, J.X., Basu, A., Bhat, K.S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mus musculus (house mouse)
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                    Hominidae; Homo.
                                             Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                      Eukaryota;
                                                                                          Homo sapiens
                                                                                                              Homo sapiens (human)
                                                                                                                                                                 BC056907.1
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                                                                                                                                                                                                                                                                                                                                                                                          TATTAATAAGGTGCCTGCGGTGCCAGAAACC 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TIGITAATAAGGIGCCTGCGGIGCCAGAAACC 6459
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RNFAELKVKRLRKKFALKTVRKARRKLIYEKAKHYHKEYROMYRTEIRMARMARKAGN
FYVPABPKLAFVIRIRGINGVSPKVRKVLOLLRLROIFNGTFVKLNKASINMLRIVEP
YIAMGYPNLKSVNELIYKRGYGKINKKRIALTDNSLIARSLGKEGIICMEDLIHEIYT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VGKRFKEANNFLWPFKLSSPRGGMKKKTTHFVEGGDAGNREDQINRLIRRMN"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gene="ribosomal protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             translation="MEAVPEKKKKVATVPGTLKKKVPAWAKNSKKKVPAVPETRKKKR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gene="ribosomal protein"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mol_type="mRNA"
strain="Swiss"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               codon_start=1
                                                                 Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                 GI:34784913
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        95.0%;
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Pred. No. 0.012;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 24.6; D
Pred. No. 6.7;
                                                                                                                                                                                                              1225 bp mRNA linea:
MGC:65154 IMAGE:5122136,
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                                                                                                                                                                                                                                        linear
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                                                                                                                                                                                                                 complete cds.
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                                                                                                                                                                                                                                        PRI 08-OCT-2003
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REFERENCE
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                      misc_feature
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Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,
Altschul, S.F., Zeeberg, B., Buctow, K.H., Schaefer, C.F., Bhat, N.K.,
Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F.,
Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,
Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,
Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,
Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,
Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,
McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S.,
Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W.,
Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A.,
Fahey, J., Helton, E., Ketteman, M., Madan, A., Kodrigues, S.,
Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,
Boutfard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D.,
Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M.,
Butterfield, Y.S., Kzzywinski, M.I., Skalska, U., Smailus, D.E.,
Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A.
Generation and initial analysis of more than 15,000 full-length
human and mouse cDNA sequences
P. 10,72321 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Steven Jones, Jennifer Asano, Ian Bosdet, Yaron Butterfield, Susanna Chan, Readman Chiu, Chris Fjell, Erin Garland, Ran Guin, Letticia Hsiao, Martin Krzywinski, Reta Kutsche, Oliver Lee, Soo Sen Lee, Victor Ling, Carrie Mathewson, Candice McLeavy, Steven Ness, Pawan Pandoh, Anna-Liisa Prabhu, Parvaneh Saeedi, Jacqueline Schein, Duane Smailus, Michael Smith, Lorraine Spence, Jeff Stott, Michael Thorne, Miranada Tsai, Natasja van den Bosch, Jill Vardy, George Yang, Scott Zuyderduyn, Marco Marra.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.go.series: IRAK Plate: 119 Row: c Column: 8
This clone was selected for full length sequencing because it passed the following selection criteria: Hexamer frequency ORF analysis, Similarity but not identity to protein.

Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NIH-MGC Project URL: http://mgc.nci.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Direct Submission
Submitted (25-AUG-2003) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
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                                                                    /db_xref="GI:34784914"
/translation="MHGPKATLQDIVLHLEPQNEIPVDLLCHEQLSDSEBENDEIDGV
NHQHLPARRAEPQRHTMLCMCCKCBARIKLVVESSADDLRAFQQLFLNTLSFVCPWCA
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/protein_id="AAH56907.1"
'note="E7; Region: E7 protein, Barly protein"
                                                                                                                                                                                                                                                                                     clone_lib="NIH_MGC_12"
                                                                                                                                                                                                                                                                                                                                  db_xref="taxon:9606"
clone="MGC:65154 IMAGE:5122136"
                                                                                                                                                                                                                                                                                                                                                                                                         organism="Homo sapiens"
                                                                                                                                                                                                                                          note="Vector:
                                                                                                                                                                                                                                                              lab_host="DH10B"
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Inagaki,Y., Tsunokawa,Y., Takebe,N., Nawa,H., Nakanishi,S., Terada,M. and Sugimura,T.
Nucleotide sequences of cDNAs for human papillomavirus type transcripts in HeLa cells
J. Virol. 62 (5), 1640-1646 (1988)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human papillomavirus type 18
Human papillomavirus type 18
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HUMHELA 1300 bp mRNA linear VI Human papillomavirus type 18 proteins E6 and E7 mRNA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alphapapillomavirus.
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26; Conservative
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                                                          TTACAGAGGTGCCTGCGGTGCCAGAAACC 231
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                                                                           TTAATAAGGTGCCTGCGGTGCCAGAAACC 32
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/product="protein_E7"
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/db_xref="GI:306835"
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MHQHLPARRAEPQRHTMLCMCCKCEARIKLVVESSADDLRAFQQLFLNTLSFVCPWCA
SQQ"
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/mol_type="mRNA"
/db_xref="taxon:333761"
                                                                                                                                                                                                                                                                                                            PAVPETVESSRKT
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/product="protein_E6"
/protein_id="AAA99512.1"
/db_xref="GI:306834"
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/mol_type="mRNA"
/db_xref="taxon:9606"
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89.7%;
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AR084343
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AR084344
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AR084350
1 (bases 1 to 1110)
Orth, G., Beaudenon, S. and Longuet, M.
Genital human papillomavirus type 68a
potentially oncogenic HPV-39
Patent: US 5981173-A 5 09-NOV-1999;
                                                                                                          Sequence
AR084343
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1. .1095
                                                                                                                                                                                                                                                                                /organism="unknown"
/mol_type="unassigned DNA"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        orth,G., Beaudenon,S. and Longuet,M. Genital human papillomavirus type 68a potentially oncogenic HPV-39 patent: US 5981173-A 7 09-MOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                   27;
                                                                                                                                                                                                                                                                                          HPVE6
Human Papilloma Virus E6
X67160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27;
                                                                                                                                                                                                 X67160.1 GI:1197491
E6 gene; transforming gene.
E8 gene; transforming gene.
Human papillomavirus type 68
Human papillomavirus type 68
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
Alphapapillomavirus.
1 (bases 1 to 1313)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 7
AR084345
                                                            Direct Submission
Submitted (03-JUL-1992) M. Longuet, Institut Pasteur, Laboratoire
Ges Papillomavirus, 25 Rue du Dr Roux, 75024 Paris Cedex 15, FRANC
Location/Qualifiers
                                                                                                                                             Longuet,M., Beaudenon,S. and Orth,G.
Two novel genital human papillomavirus (HPV) types, HPV68 and HPV70, related to the potentially oncogenic HPV39
J. Clin. Microbiol. 34 (3), 738-744 (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unclassified.
                                                                                                                                       8904450
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27; Conservative
                                                                                                              onguet,
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                                                                                                                          (bases 1 to 1313)
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/organism="Human papillomavirus type 68"
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/ceIl_line="intraepithelial neoplasia"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="unknown"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    location/Qualifiers
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from patent US 5981173.
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Pred. No.
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5 gene
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AR084352
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                                    HPU22461
Human papillomavirus type 70 E6
Ll protein (L1) genes, complete
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Query Match
Best Local Similarity
Matches 27; Conserv
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Sequence
AR084352
                                                                                                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 3283)
Orth,G., Beaudenon,S. and Longuet,M. Genital human papillomavirus type 688 potentially oncogenic HPV-39 Patent: US 5981173-A 14 09-NOV-1999; Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unclassified.
                                     TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 32
TTATCAATAAGGTGCATGAGTTGCCTGAAACC 2785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 32
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/protein id="CAA47633.1"
/protein id="CAA47633.1"
/db_xref="GOA:P54668"
/db_xref="GOA:P54668"
/db_xref="UniProtKB/Swiss-Prot:P54668"
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/cb_xref="UniProtKB/Swiss-P54667"
/cb_xref="UniProtKB/Swiss-P54667"
/cb_
                                                                                                                                                                                                                                                                                                           /organism="unknown"
/mol_type="unassigned
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84.4%;
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Pred. No. 12;
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US 59
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GI:1345087

protein cds.

linear VRL 3 (E6), E7 protein

VRL 31-MAY-1996

(E7), and

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Matches 27
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Submitted (13-MAR-1995) Michele Longuet, Laboratoire
Papillomavirus, Unite INSERM 190, Institut Pasteur, 2
Roux, Paris 75015, France
1 TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 32
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Two novel genital human papillomavirus (HPV) types,
HPV70, related to the potentially oncogenic HPV39
J. Clin. Microbiol. 34 (3), 738-744 (1996)
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Human papillomavirus type 70
Viruses; dsDNA viruses, no RJ
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                                                                         Similarity
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                                                          Conservative
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                                                                                                                                                                                                                                                                                                              2939. .3268
/gene="E7"
2939. .3268
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                                                                                                                                                              /note="putative"
2454. .2930
                                                                                                                                                                                                                                                                                                                                                                 /translation="marfpnpaerpyklpdlctaldttlhditidcvycktqlqqtev
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iramsclkplcpaeklrhvntkrrfhqiagsytgqcrhcwtsnredrrrirretqv"
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                                                                                                                                                                                                                                                                                                                                                                                                                          /codon_start=1
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/mol_type="genomic DNA"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 note="putative transforming protein"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PUBMED
                                                                                                                                                                                                                                                                                                                                                    gene
                                                                                            gene
                                                          CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2754 TTATCAATAAGGTGCATGAGTTGCCTGAAACC 2785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Reuter,S., Bartelmann,M., Vogt,M., Geisen,C., Naplerski,I., Kahn,T., Delius,H., Lichter,P., Weitz,S., Korn,B. and Schwarz,E. APM-1, a novel human gene, identified by aberrant co-transcriptivith papillomavirus oncogenes in a cervical carcinoma cell line, encodes a BTB/POZ-zinc finger protein with growth inhibitory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APM-1 gene; E6 gene; E7 gene;
Human papillomavirus type 68
Human papillomavirus type 68
Viruses; dsDNA viruses, no RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Characterization of a novel human papillomavirus DNA in the cervical carcinoma cell line ME180 J. Virol. 65 (10), 5564-5568 (1991)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alphapapillomavirus.

1 (bases 1 to 4618)

Reuter,S., Delius,H., Kahn,T., Hofmann,B.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Krebsforschungszentrum, Angewandt
Feld 242, D-69120 Heidelberg, FRG
Revised by author 18-DEC-97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               E7 genes, and Homo Y14591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Submitted (13-AUG-1997) H. Delius,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Delius,H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SCHWarz, S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Y14591.1 GI:3005941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1716694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (bases 1 to 4618)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17 (1), 215-222 (1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sequence M73258.
                                                                                                         /Godon_start=1
/product="E6 protein"
/prodein_id="CAR74931.1"
/protein_id="CAR74931.1"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     840. .4618
   /codon_start=1
/product="E7 protein"
                                                                                                                                                                                                                                                                                                                                                    tissue_type="uterine cervix" . .477
                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/mol_type="mRNA"
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/chromosome="18"
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/mol_type="mRNA"
/db_xref="taxon:45240"
                                                                         'gene="E7"
                                         gene="E7"
                                                                                                                                                                                                                                                                                                                                 gene="E6"
                                                                                                                                                                                                                                                                                                                                                                                                       map="q21"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ocation/Qualifiers
                                                                                                                                                                                                                                                                                               gene="86"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ocus
                                                                                                                                                                                                                                                                                                                                                                                         line="ME180"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     no RNA stage; Papillomaviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Angewandte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           fusion.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Deutsches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tumorvirologie,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    mRNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  zur Hausen, H. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Im Neuenheimer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VRL 18-APR-2005
us type 68 E6 and
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REFERENCE
AUTHORS
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ORGANISM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HUMHPVME18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORIGIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     proviral gene.
Human papillomavirus
Human papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 TTATTAATAAGGTGCCTGCGGTGCCAGAAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              J. Virol. 65 (10), 5564-5568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Viruses; dsDNA viruses, no RNA stage; Papillomaviridae, unclassified Papillomaviridae.

1 (bases 1 to 6042)
Reuter,S., Delius,H., Kahn,T., Hofmann,B., zur Hausen,H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Characterization of a novel human papillomavirus DNA in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Schwarz, E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        M73258.1 GI:184383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human cellular DNA/Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1716694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
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/db_xref="Inte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /db_xref="InterPro:IPR000148"
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                                                                                                                                                                                                                                               5994. .6042
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                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
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/cell_line="ME180"
/cell_type="carcinoma"
                                                                                                                                                           organism="Homo sapiens"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Brnaggllafalaenvaaarpyfplpdpwaaglaglpglaglnhvasmseann"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /codon_start=1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  protein_id="CAA74932.1"
tissue_type="cervix"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gene="APM-1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gene="APM-1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      db_xref="GOA:073452"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        db_xref="GI:3005943"
                                                                                                                                                                                                                                                                                     focus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        75.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 24; DB
Pred. No. 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  line ME180
-5568 (1991)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   papillomavirus proviral DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ç.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  zur Hausen, H. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VRL 30-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0,
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                                                                                                                                                                                                                                                                                                                               ORIGIN
                                                                                                                                                                                                                                           Query Match
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                                                                                                                                                                                                 Госат
    4246 TTATCAATAAGGTGCATGTGTTGCCTGAAACC 4277
                                                                                                                                                           . Similarity
27; Conserv
                                                                       TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 32
                                                                                                                                                           75.0%;
ilarity 84.4%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /product="11"
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cvprigremakgksckpsnvpgdpepplellvntpiQdpdnidtgygamdpstiqetks
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /product="L2"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "QELSIWKWKLTRR"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein_id="AAF14013.1"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 codon_start=1
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                                                                                                                                                       Score 24; DB Pred. No. 10; 0; Mismatches
                                                                                                                                                                                         DB
10;
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REFERENCE
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AUTHORS
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ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
ACCESSION
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DQ080079
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PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SGS
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Human papillomavirus type 68a
Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (31-MAY-2005) Microbiology and Immunology, Albert Einstein College of Medicine of Yeshiva University, 1300 Morris Park Ave., Ullmann Room 515, Bronx, NY 10461, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 (bases 1 to 7822)
Narechania,A., Chen,Z., Desalle,R. and Burk,R.D.
Phylogenetic Incongruence among Oncogenic Genital Alpha Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DQ080079 7822 b
Human papillomavirus type 68a,
DQ080079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 (bases 1 to 7822)
Chen, Z. and Burk, R.D.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Papillomaviruses
J. Virol. 79 (24), 15503-15510 (2005)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alphapapillomavirus.
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/isolation source="biopsy of low-grade CII

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            country="France"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GI:71726685
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CDS

Search completed: May 24, 2006, 06:51:31 Job time : 1059.62 secs

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301

TTATTGATAAGGTGCATGAGTTGCCTGAAACC 332

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Matches
                                                                                                        Query Match
                                                                                     Local
1 TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 32
                                                                                     Similarity
                                                                  Conservative
                                                                                                                                                                         NAIYYAARERGMHNIDHQVVPPVNISKTKAYQAIELQMALESLAKTAYSAEBWTLRDT
SNELMHTKPKQCFKKHGVTVEVWYDGDKSNSMHYVVWGTIYFKNSTDTWCKTQGRVDY
WGVYYNYEQQKTYYBRRMQDAQLYGTSGKWDVHYNGNIHCFDGKWSTTDGKVSTTBS
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SRVAGPRLYSRAHQQVRVSNFDFVTHPSSFVTFDNPAFEPVDTTLTYEPADIAFDPDF
LDIVRLHRPALTSRGTTVRFSRVGKKATMFTRRGTQIGAQVHYYHDISNITPADSIEL
QPLVARPEQADPMDNIXDIXAFDTDNTTVLDTAFHARFTTRRHISVPSLASARSTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5488. .7005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NTTI PLGTAMNTFVNTGPDVVLPSTTPQLPLTPSTPIDTTFAITI YGSNYYLLPLLFF
LLKKRKHLPYFFTDGI VAS "
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                                                                                   75.0%;
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                                                             0;
                                                                                     Score 24;
Pred. No.
                                                                  Mismatches
                                                                                                             DB 10;
                                                                  5
                                                                                                           Length 7822;
                                                                  Indels
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Maximum
Listing
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Maximum DB
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OM nucleic - nucleic search, using
                                                                                                                                                                                                                 Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Database
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Ax7978777 Human pap

Aed52645 Fusion pr

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                                                                                                                                                          Synthetic
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       Claim 27; Page 33; 70pp; English
                                            WPI; 1997-274349/25
                                                           Gordon P,
                                                                                        15-NOV-1995;
                                                                                                                                                Human papillomavirus.
                    distinguish
                       Probes for detection of Human Papillomavirus Type 16 and Type 18 - can distinguish between Type 16 and 18, associated with genital cancers.
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                                                                          GEN-PROBE INC.
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                                                           Hammond
                      genital cancers.
                                                                                                                                                                                                                                                                                                                                         Adx50135 Plant ful Adx50135 Plant ful Aac77791 Human can Ac13814 Rice stre Ac138150 Rice stre Aaa70228 Plasmodiu Adx8698 Breast sp Aaz52901 Human pro Aaz42222 Human nor Aaf18201 Lung canc Aac75871 Human ORF Aah15763 Human ORF Aah15763 Human CDN Aa878315 DNA encod Abk63419 Rat seque Adw21623 Rat hepat Adw21623 Plant ful Aak94586 Human ful Aak94586 Human ful Aak94586 Human ful Aak131482 Full leng
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ad145638 Human ova
Ad163723 Human ova
Adx62815 Plant cDN
Ad)35572 Plant cDN
Aebl8185 Gibberell
Aah14078 Human cDN
Acc51086 Human Pla
Ad145938 Human ova
Ad145938 Human ova
                                                                                                                                                                                                                                                                                                              Aad24414 Human RNA
                                                                                                                                                                                                                                                                                                                            Adb23035 Corn meth
Ab102360 Drosophil
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Adq24928 Human sof
Ads47748 Bacterial
Ado81676 Plant ful
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CC Novel hybridisation assay probes have been developed comprising an cligonucleotide which will hybridise under selected conditions to Human CC papillomavirus (HPV) Type 16 and/or 18 (but not Types 6, 11, 31, 33, 35, CC 39, 45, 51, 52, or 58) target nucleic acids to form detectable target: CC probe duplex. The present sequence represents a specifically claimed HPV CP primer (amplification oligonucleotide). Oligonucleotides are useful CC to detect HPV Type 16 and/or 18 in samples e.g. cervical smears, body CC fluid, and distinguish these from other HPV variants. Papillomaviruses and HPV Types 16 and 18 are associated with genital CC cancers. HPV PCR primers can amplify HPV Type 16 and/or 18 nucleic acid CC in a sample. HPV Type 16 and/or 18 can be detected by adding a probe and CC detecting probe; target duplex formation; target nucleic acid is CC amplifying nucleic acids with at least one specifically claimed PCR CC amplifying nucleic acids with at least one specifically claimed PCR CC Oligonucleotides can distinguish target sequences from phylogenetically CC close HPV Types 16 and 18 whilst available detection sera react with CC antigens of all papillomaviruses
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Best Local S
Matches 16
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   Novel hybridisation assay probes have been developed comprising an oligonuclectide which will hybridise under selected conditions to Human oligonuclectide which will hybridise under selected conditions to Human papillomavirus (HPV) Type 16 and/or 18 (but not Types 6, 11, 31, 33, 35, 39, 45, 51, 52, or 58) target nucleic acids to form detectable target: probe duplex. The present sequence represents a specifically claimed HPV PCR primer (amplification oligonuclectide). Oligonuclectides are useful to detect HPV Type 16 and/or 18 in samples e.g. cervical smears, body fluid, and distinguish these from other HPV variants. Papillomaviruses
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                        Probes for detection of Human Papillomavirus Type 16 and Type 18 - can distinguish between Type 16 and 18, associated with genital cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16;
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                                                                                                                                                                       70pp; English.
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Pred. No. 0.4;
12; Mismatches
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CC Novel hybridisation assay probes have been developed comprising an CC oligonucleotide which will hybridise under selected conditions to Human CC oligonucleotide which will hybridise under selected conditions to Human CC papillomavirus (HPV) Type 16 and/or 18 (but not Types 6, 11, 31, 35, 35, 35, 45, 51, 52, or 58) target nucleic acids to form detectable target: CC probe duplex. The present sequence represents a specifically claimed HPV CP primer (amplification oligonucleotide). Oligonucleotides are useful CC to detect HPV Type 16 and/or 18 in samples e.g. cervical smears, body CC fluid, and distinguish these from other HPV variants. Papillomaviruses CC are small DNA viruses and HPV Types 16 and 18 are associated with genital CC cancers. HPV PCR primers can amplify HPV Type 16 and/or 18 nucleic acid is CC camplifying nucleic acids with at least one specifically detected by CC camplifying nucleic acids with at least one specifically detected by CC conjunctiving nucleic acids with at least one specifically claimed PCR CC conjunctiving nucleic acids with at least one specifically claimed PCR CC conjunctiving nucleic acids with at least one specifically claimed PCR conjunctiving nucleic acids with at least one specifically claimed PCR conjunctiving nucleic acids with at least one specifically claimed PCR conjunctiving nucleic acids with at least one specifically claimed PCR conjunctiving nucleic acids with at least one specifically claimed PCR conjunctiving nucleic acids with at least one specifically claimed PCR conjunctiving nucleic acids with at least one specifically claimed PCR conjunctiving nucleic acids with at least one specifically claimed PCR conjunctivities can distinguish target sequences from phylogenetically claimed PCR conjunctivity and distinguish target sequences from phylogenetically claimed PCR conjunctivities and distinguish target sequences from phylogenetically claimed PCR conjunctivity and distinguish target sequences from phylogenetically claimed PCR conjunctivities and conjunctivities and
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 23; Page 34; 70pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Probes for detection of Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1997-274349/25
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Pred. No. 0.
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                                              CC Novel hybridisation assay probes have been developed comprising an CC oligonuclectide which will hybridise under selected conditions to Human CC papillomavirus (HPV) Type 16 and/or 18 (but not Types 6, 11, 31, 33, 35, CC 39, 45, 51, 52, or 58) target nucleic acids to form detectable target: CC probe duplex. The present sequence represents a specifically claimed HPV CC probe. Oligonuclectides are useful to detect HPV Type 16 and/or 18 in CC samples e.g. cervical smears, body fluid, and distinguish these from CC other HPV variants. Papillomaviruses are small DNA viruses and HPV Types 16 and/or 18 mucleic acid in a sample. HPV Type 16 and/or 18 mucleic acid in a sample. HPV Type 16 and/or 18 can be detected by adding a probe and detecting probe:target CC duplex formation; target nucleic acid is optionally amplified. Type 16 cone specifically detected by amplifying nucleic acids with at least CC one specifically claimed PCR primer. For Type 18 detection, a helper CC probe may be used. Oligonucleoted acid is whilst available detection CC sera react with antigens of all papillomaviruses
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Probes for detection of Human Papillomavirus Type 16 and Type 18 - can distinguish between Type 16 and 18, associated with genital cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           close HPV Types 16 and 18 whilst available detection sera react antigens of all papillomaviruses
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human Papillomavirus Type 16 probe.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Page 33; 70pp; English.
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BP;
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                                                                                                                                                       The invention relates to a novel immortalized endometrial glandular epithelial cell strain in which an exogenous immortalizing gene is introduced and the properties of the cell line as non-cancer typical glandular epithelial cells, are maintained. The cell line of the invention may be useful for research of reproduction, particularly for analyzing the adhesion of the fertilized egg during implantation, analyzing the effect of steroid hormones, analyzing the mechanism of multistep canceration of the inner glandular epithelial membrane by genetic engineering of the cell line which is otherwise non-cancerous, and analyzing the effect of carcinogenic substances on the cell line. The cell line maintains the properties of normal somatic cells and the properties of endometrial glandular epithelial cells. The current sequence is that of the Human papillomavirus type 16 86 deltais1 mutant that is the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                   Immortalized endometrial glandular epithelial cell strain containing exogenous immortalizing gene and maintains properties of non-cancer and typical glandular epithelial cells, useful in field of research creproduction.
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                                                                                                                   Sequence 452 BP; 156 A;
                                                                                                                                                                                                                                                                                                                                                                          Claim 5;
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                                                                      Local Similarity
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GACATTATTGTTATAGTTTGTATGGAAC 256
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                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 4; 22pp; Japanese.
                                                                                                                                                invention.
                                                         Conservative
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                                                                    100.0%;
                                                                                                                   70 C;
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                                                                      Score 28; DB 14; Length 452; Pred. No. 0.41;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human papillomavirus 16 E6
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E6 siRNA sequence

AAL54430

03-APR-2003

(first entry)

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RESULT 8
ADX26908
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AC ADX2
AC ADX2
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DT 05-M
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DB Huma
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CELL
XW cell
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OS Huma
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to a novel method for selective post-translational CC silencing in a mammalian cell of the expression of an exogenous gene of CC viral origin. The method comprises introducing into the cell a small CC interfering RNA (siRNA) construct that is homologous to a part of the CC mRNA sequence of the gene. The method is useful for the selective post-cc transcriptional silencing of an exogenous gene of viral origin (e.g. an CC compose or human papilloma virus (HPV) gene) in a mammalian cell. The CC method or the siRNA is particularly useful for treating cancer, human CC cervical cancer, human immunodeficiency virus (HIV), smallpox, flu, CC common cold, or a disease caused by a HPV (e.g. genital warts, cervical cancer, penile cancer, malignant squamous cell carcinomas or verruca CC vulgaris). An siRNA construct or vector is useful for use as a medicament CC content of the diseases mentioned. The polynucleotide sequence of the invention CC can be used to treat disorders by gene therapy. This polynucleotide content of the invention CC can be used to treat disorders by gene therapy.
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Best Local
                                                                                     cell culture; immortalization; Gynecology and obstetrics; Andrology; cancer; neoplasm; ds.
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                                Human papillomavirus type 16
                                                                                                                                                                                    Human papillomavirus type 16 E6 wild-type gene
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14-JAN-2002; 2002GB-00000688.
17-JUN-2002; 2002GB-00013855.
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Pred. No. 0.41;
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RESULT 9
AAT31834
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Matches 28
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misc_feature
                                         misc_feature
                                                                                   misc_feature
                                                                                                                                                                           Human papillomavirus.
                                                                                                                                                                                                    Human papilloma virus; E6; E7; deletion mutant; humoral immune response; cellular immune respons
                                                                                                                                                                                                                                                Human papilloma virus E6/E7 protein variant.
                                                                                                                                                                                                                                                                              27-AUG-2003
11-JAN-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Immortalized endometrial glandular epithelial cell strain containing exogenous immortalizing gene and maintains properties of non-cancer and typical glandular epithelial cells, useful in field of research or typical glandular epithelial cells, useful in field of research or typical glandular epithelial cells, useful in field of research or typical glandular epithelial cells.
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(KOKU-)
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KOKURITSU GAN
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118. .120
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100.0%; Pred. No. 0.
Cive 0; Mismatches
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                                                                                                  "E6/E7 fusion protein (deletion mutant)."
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A variant of the human papilloma virus (HPV) 86 or 87 protein which elicits a humoral and/or cellular immune response against HPV can be used in vaccines against HPV or to treat HPV infection. The variant is preferably a deletion mutant comprising at least half, and preferably two-thirds of full length 86 or 87 protein starting from the N- or C-thirds of full length 86 or 87 protein starting from the N- or C-thirds of starting from the N- or C-thirds of starting from the N- or C-thirds of full length 86 moiety fused to a full length 87 moiety.
                                                                     Vaccine variants of human
E6 and/or E7 protein, pref
prevent HPV infection.
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UNIV QUEENSLAND.
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121. .123
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160. .162
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RESULT 10
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Best Local S
Matches 28
     A variant of the human papilloma virus (HPV) E6 or E7 protein which elicits a humoral and/or cellular immune response against HPV can be used in vaccines against HPV or to treat HPV intection. The variant is preferably a deletion mutant comprising at least half, and preferably two thirds of full length E6 or E7 protein starting from the N- or C-terminal, or is a full length E6 moiety fused to a full length E7 moiety. The variant optionally has a linkage moiety and a foreign protein or peptide which facilitates the purification of, and enhances the immunogenicity of, the fusion protein. This sequence encodes a fusion between the C-terminal end of E7 and the N-terminal end of E6. (Updated on 27-AUG-2003 to correct OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The variant optionally has a linkage molety and a foreign protein or peptide which facilitates the purification of, and enhances the immunogenicity of, the fusion protein. This sequence encodes a fusion between the C-terminal end of E and the N-terminal end of E7. The protein is also a deletion mutant generated from the sequence describ in AAT31833. (Updated on 27-AUG-2003 to correct OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human papilloma virus; E6; E7; del humoral immune response; cellular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27-AUG-2003
11-JAN-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAT31835;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 519 BP;
                                                                                                                                                                                         Vaccine variants of human papilloma virus antigens - contain variants B6 and/or E7 protein, pref. deletion mutants, and are used to treat or prevent HPV infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human papilloma virus E6/E7 protein variant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAT31835
                                                                                                                                                                                                                                                                                   Edwards SJ,
                                                                                                                                                                                                                                                                                                            (CSLC-)
                                                                                                                                                                                                                                                                                                                                                   20-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                            20-DEC-1995;
                                                                                                                                                                                                                                                                                                                                                                                                      27-JUN-1996
                                                                                                                                                                                                                                                                                                                                                                                                                              WO9619496-A1.
                                                                                                                                                                  Example
                                                                                                                                                                                                                                               P-PSDB;
                                                                                                                                                                                                                                               1996-309518/31.
DB; AAR97563.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      papillomavirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             65
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                  3; Page 18; 37pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACATTATTGTTATAGTTTGTATGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACATTATTGTTATAGTTTGTATGGAAC
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(first en
                                                                                                                                                                                                                                                                                   Cox J,
                                                                                                                                                                                                                                                                                                            QUEENSLAND
                                                                                                                                                                                                                                                                                                                                                   94AU-00000157
                                                                                                                                                                                                                                                                                                                                                                            95WO-AU000868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 175 A; 92 C; 113 G; 139 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        /product=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /*tag=
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                                                                                                                                                                   English.
                                                                                                                                                                                                                                                                                     EA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                        "E6/E7 fusion protein.
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Pred. No. 0.41;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               deletion mutant;
                                                                                                                                                                                                                                                                                      Frazer I;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HPV;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        the sequence described
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    response;
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RESULT 11
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Matches 28
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16-OCT-2003
25-MAR-2003
28-JUN-1995
                                                                                                             The sequences of the E6 and E7 polypeptide-encoding regions of human papillomavirus (HPV) 16 and 18 are given in AQ75470-71 and the encoded proteins in AAR63865-66, respectively. Probes and primers based on these sequences were used for HPV infection diagnosis; expression of E6 and E7 is diagnostic for cervical cancer or pre-malignant states. (Updated on 25-MAR-2003 to correct PN field.) (Updated on 16-OCT-2003 to standardise
                                                                                                                                                                                                            Human papilloma virus detection assay - by amplification using self sustained sequence replication and hybridisation with a detector probe.
                                                                                                                                                                                                                                             WPI; 1995-006821/01
P-PSDB; AAR63865.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cbs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 519
                                                                                                                                                                                         Disclosure; Page 24-26; 79pp; English.
                                                                                                                                                                                                                                                                                                                       06-MAY-1993;
                                                                                                                                                                                                                                                                                                                                           06-MAY-1994;
                                                                                                                                                                                                                                                                                                                                                                 24-NOV-1994.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human papillomavirus; strain 16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAQ75470 standard; DNA;
                                                                                 Sequence 570
                                                                                                                                                                                                                                                                                                                                                                                      WO9426934-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cervix cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HPV16 E6/E7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAQ75470;
                                                                                                                                                                                                                                                                                                  (BAXT ) BAXTER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HPV16; E6
252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          458
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                                        . Similarity
28; Conserv
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GACATTATTGTTATAGTTTGTATGGAAC 279
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             GACATTATTGTTATAGTTTGTATGGAAC 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 encoding region
                                        100.0%;
larity 100.0%;
Conservative 0
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(revised)
(first en
                                                                                 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP; 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein; E7 protein; diagnosis; cervical dyplasia;
ds.
                                                                                                                                                                                                                                                                                                  DIAGNOSTICS INC.
                                                                                                                                                                                                                                                                                                                                            94WO-US005085
                                                                                                                                                                                                                                                                                                                       93US-00058920
                                                                                  199
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                                                                                                                                                                                                                                                                                                                                                                                                          /label=
                                                                                                                                                                                                                                                                                                                                                                                                                                 /*tag= a
/label= E6_encoding_region
                                                                                                                                                                                                                                                                                                                                                                                                                               81. .570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      entry)
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100.0%; Pred. No. 0.41;
                                                                                A; 93 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; 97 C; 111 G; 144 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                             b
E7_encoding_region
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                                        0;
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                                       Score 28; DE
Pred. No. 0.4
0; Mismatches
                                                                                 119 G; 159 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                  0.41;
                                                           DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 2; Length 519
                                        0;
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                                                            Length 570;
                                         Indels
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                                       Gaps
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                                        0;
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18-NOV-2004

(first entry)

ds; gene; cytostatic; virucide; dengue virus; recombinant replicon;

Human papillomavirus type 16 E7 gene for Dengue virus vaccine.

RESULT 13 ADR47004

ADR47004 standard;

DNA;

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RESULT 12
AAN91600
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                       S
                                                              Query Match
Best Local
                                                   Matches
                                                                                                                           The patent is for a rapid in situ hybridisation assay for detecting and typing human papilloma virus (HPV) in non-frozen cellular smears fixed to a support in absence of aldehyde-based crosslinking reagents. The assay comprises: (1) combining nucleic acid in the sample with at least one detectable probe able to hybridise with 1 or more HPV types; and (2) detecting presence or absence of hybrid complexes. Opt. several probes are used, eg one for HPV types 6 and 11, associated with benign warts, and one for types 16, 18, 31, 33 and 35, associated with cervical cancer. The assay can differentiate between HPV types. It is esp. used as a secondary test. The probes can be synthesised or cloned. (Updated on 27-AUG-2003 to correct OS field.)
                                                                                                     Sequence 712 BP; 253 A; 120 C;
                                                                                                                                                                                                                                                                                                                 Hybridisation test with long labelled examining cervical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human papillomavirus.
                                                                                                                                                                                                                                                                                          Disclosure; Page ?; 39pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       02-OCT-1987;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-SEP-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO8902934-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human papilloma virus; type 16; cellular smear; benign cervical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Partial nucleotide sequence 16 (HPV-16).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-AUG-2003
17-JUL-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAN91600;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAN91600 standard;
                                                                                                                                                                                                                                                                                                                                                                         WPI; 1989-114406/15.
                                                                                                                                                                                                                                                                                                                                                                                                   Schwartz DE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-APR-1989.
                                                                                                                                                                                                                                                                                                                                                                                                                              (MICR-) MICROPROBE CORP
333
                                                   28;
                                                               Similarity
               GACATTATTGTTATAGTTTGTATGGAAC 28
GACATTATTGTTATAGTTTGTATGGAAC 360
                                                  100.0%;
ilarity 100.0%;
Conservative (
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(first en
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   88WO-US003367.
                                                                                                                                                                                                                                                                                                                   for human papilloma virus in cell smears - probe specific for particular virus types, smears.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA;
                                                                                                                                                                                                                                                                                                                                                                                                   TH;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         712
                                                   0;
                                               Score 28; DB 1;
Pred. No. 0.41;
0; Mismatches
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                                                                                                     155 G; 184 T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         in situ hybridisation assay; wart; cervical cancer.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             of human
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                                                                                                     U; 0 Other;
                                                                           Length 712;
                                                   Indels
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                                                                                                                                                                                                                                                                                                                                 by reaction esp. for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (VPV)
                                                   Gaps
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RESULT 14
AEF40156
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   BXXXE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CC A dengue virus recombinant replicon has a deletion of the complete coding CC sequence for preM protein of dengue virus and also includes elements of CC e.g. the non-coding region in the whole of the 5'-end, the coding region CC of the front 20 amino acids in the C protein, and the coding region of CC obtained vaccines are useful in producing preventives or/and remedies for CC cancer like cervical cancer and viral diseases. Such vaccines can CC efficiently express antigen in infected cells, which is because dengue CC virus can infect dendritic cells, and can effectively present antigen to CC provide immunity effect. Different types of dengue virus can be used to CC repeatedly produce efficient immune response thereby strengthening the CC capter immune system against the pathogen that contains such antigen. CC Human papillomavirus (HPV) vaccines were prepared by using a gene-CC expressing system using of the full-length dengue virus cDNA clone (CC provide) (BHX) cells to enable the screening of BHX-21 Tet-off cell lines. This sequence corresponds to the HPV type 16 E7 gene used as the CC gene of interest in the recombinant replicon of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local S
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                                                            AEF40156
                                                                                                                            AEF40156 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 768 BP; 255 A; 139 C; 172 G; 202 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 2; SEQ ID NO 1; 38pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Virus-like particle vaccines containing dengue virus recombinant replicon as core for carrier, applicable in preventives or/and remedies for tumors like cervical cancer and viral diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENBANK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-625870/60
P-PSDB; ADR47005.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 human
23-MAR-2006
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                          545
                                                                                                                                                                                                                                                                                                                                                       1 GACATTATTGTTATAGTTTGTATGGAAC 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SHANGHAI TENGEN BIOMEDICAL CO LTD. TENGEN BIOMEDICAL CO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BEIJING ORIENTAL TENGEN TECHNOLOGY DEV C.
                                                                                                                                                                                                                                                                                          GACATTATTGTTATAGTTTGTATGGAAC 572
                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2003CN-00115272.
2003CN-00115273.
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /*tag= a
/product= "HPV-16 E7 protein"
                                                                                                                                DNA; 768 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 28; DB 13; Length 768; Pred. No. 0.41;
                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                       0,
                                                                                                                                                                                                                                                                                                                                                                                                                       ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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XXXXXXXXXX
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Best Local S
Matches 28
                                                                                                                                                                                                                                                                                                 The present invention provides a virus-like particle (VLP) vaccine which contains dengue virus (DEN) recombinant replicon as its core. The DEN replicon contains exogenous nucleoties such as human papillomavirus (HPV) antigen proteins, immune regulators or combination of HPV antigen and immune regulators. The invention is useful for producing a drug for the prophylaxis and treatment of cancer or viral
                                                                                                                                                                                                                                                                                                                                                                                                     New recombinant DEN replicons with a deletion of preM, useful for producing a drug for the prophylaxis and treatment of cancer or viral infection.
                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30-JAN-2004;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-JAN-2003;
30-JAN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human papillomavirus type 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          coding sequence; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Vaccine; virus-like particle; replicon; therapeutic; cancer; cytostatic; neoplasm; viral infection; virucide; infection; oncogene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human papillomavirus 16 (HPV-16) E7-E6 oncogene
                                                        27-AUG-2003
25-MAR-2003
                                                                                                                AAT14663
                                                                                                                                                                                                                                                                                                producing a
                                                                                                                                                                                                                                                                                                                                                                              Example 2; SEQ ID NO 1; 24pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENBANK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2006-109169/11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-JUL-2005;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US2006018928-A1.
                                            10-OCT-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (PANG/)
                                                                                                                                                                        545
                                                                                                                                                                                                                     28;
                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                AEF40157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PANG
                                                                                                                                                                                    GACATTATTGTTATAGTTTGTATGGAAC 28
                                                                                                                standard;
                                                                                                                                                                                                                                                                768 BP; 255 A; 139 C; 172 G; 202 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    AF486352, AF469197, AF472508.
                                                                                                                                                                        GACATTATTGTTATAGTTTGTATGGAAC 572
                                                                                                                                                                                                                                                                                       The present sequence is a human papillomavirus
                                                                                                                                                                                                                    100.0%;
llarity 100.0%;
Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ×
                                           (revised)
(revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2003CN-00115272.
2003CN-00115273.
2004WO-00072274.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2005US-00192923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        oncoprotein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /product= "Human papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             'partial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            'note= "No stop codon"
                                                                                                                DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         D
                                                                                                                                                                                                                    0
                                                                                                                                                                                                                    Score 28; DB
Pred. No. 0.4
0; Mismatches
                                                                                                                                                                                                                                            DB 15;
                                                                                                                                                                                                                                41;
                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16
                                                                                                                                                                                                                                          Length 768;
                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (HPV-16)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     E7-E6
                                                                                                                                                                                                                      <u>.</u>
                                                                                                                                                                                                                      Gaps
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Human papilloma virus; HPV; detection; cervical cancer; amplification;

E6/E7 region of Human Papilloma Virus 16 (HPV 16).

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An in situ hybridisation assay for detecting an intracellular marker of low copy number in cells comprises fixing the cells to a support using paraformaldehyde; treating the cells with a protease to permeabilise them without altering morphology; adding amplification reagents; incubating the cells at below fifty degrees celeius to perform amplification by self—sustained sequence replication; adding a labelled probe complementary to the region between the primers; washing cells to remove unhybridised probe and then detecting the labelled probe. The E6/E7 region of human papilloma virus (HPV) 16 is used especially to detect mRNA being transcribed from this region which becomes active in transformed cells. The method can be used for the early diagnosis of cervical cancer. Primers used to amplify fragments of the E6/E7 region are described in AAT14664-T14674. (Updated on 25-AMR-2003 to correct PF field.) (Updated on 27-AUG-2003 to correct OS field.)
                                                                                                                                                                                                                               Detection of low copy number intracellular markers - of target RNA in fixed cells then hybridisation with detecting human papilloma virus in cervical cells.
                                                                                                                                                                                                         Example 2; Fig 3; 21pp; English.
                                                                                                                                                                                                                                                                                  WPI; 1996-200273/20
                                                                                                                                                                                                                                                                                                                                                          10-DEC-1991;
                                                                                                                                                                                                                                                                                                                                                                                   22-MAR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                   US5506105-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 primer_bind
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     primer_bind
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          primer_bind
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             primer_bind
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               primer_bind
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    misc_binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       primer_bind
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human papillomavirus type 16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hybridisation;
                                                                                                                                                                                                                                                                                                                                   (DADE-)
                                                                                                                                                                                                                                                                                                                                   DADE
                                                                                                                                                                                                                                                                                                                                   INI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     diagnosis; transformed cell;
                                                                                                                                                                                                                                                                                                                                                          91US-00808456
                                                                                                                                                                                                                                                                                                                                                                                   94US-00216233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /*tag= g
/note= "Primer
660. .683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /*tag= b
/note= "Primer H16-58 binding site."
37. .57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /*tag= i
/note= "Primer H16-743
745. .768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note= "Primer 454. .474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /*tag= h
/note= "Primer BB112
/15. .738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               658. .681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /*tag= f
/note= "Primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        480. .503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /*tag= d
/note= "Primer BB114 binding site."
                                                                                                                                                                                                                                                                                                                                                                                                                                                          note= "Primer H16-773 binding site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              note= "Primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 notes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   . 621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      H16-686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BB109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BB111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BB4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BB113 binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      binding site."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 binding site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              binding site."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   binding site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      E6; E7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gite
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                site."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               site.
                                                                                                                                                                                                                                           by 3SR amplification labelled probe, for
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Sequence

776

BP;

260

A;

139

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208

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0

ς;

0 Other

RESULT 17
AAQ29389
ID AAQ29
XX
AC AAQ29
XX
DT 24-OC
DT 25-M2
DT 09-M2

AAQ29389;

AAQ29389

standard;

DNA,

790

ВÞ

24-OCT-2003 25-MAR-2003 09-MAR-1993

(revised)
(revised)
(first entry)

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RESULT 16
AAX89756
ID AAX89
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Best Local S
Matches 28
                                                  Matches
                                                                            Query Match
                                                                                                       Sequence
                                                                                                                                  comparing th
27-AUG-2003
                                                                                                                                This nucleotide probe is specific for the HPV16 Human Papilloma Virus (HPV) gene. The degree of HPV infection can be assessed, by measuring levels of expression of genes involved in the diseased state, and comparing the expression to each other or to reference genes. (Updated 27-AUG-2003 to correct OS field.)
                                                                                                                                                                                                                 Disclosure; Fig 5; 35pp; English.
                                                                                                                                                                                                                                             New method for assessing Human Papilloma Virus (HPV) infection comparison of gene expression levels.
                                                                                                                                                                                                                                                                                     WPI; 1999-443850/37
                                                                                                                                                                                                                                                                                                                Lorincz AT;
                                                                                                                                                                                                                                                                                                                                                                                12-DEC-1997;
05-JAN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                         11-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              human papilloma virus; infection; assay; cancer; virus; HPV; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                аввау;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Probe sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-AUG-2003
12-OCT-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAX89756;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAX89756 standard;
                                                                                                                                                                                                                                                                                                                                                                   17-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9929890-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human papillomavirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-JUN-1999.
                                                                                                                                                                                                                                                                                                                                        (DIGE-) DIGENE
                                                                 Local
258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         251
               1 GACATTATTGTTATAGTTTGTATGGAAC 28
                                                  28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 GACATTATTGTTATAGTTTGTATGGAAC 28
                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                       779 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GACATTATTGTTATAGTTTGTATGGAAC 278
                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (revised)
(first entry)
                                                                                                                                                                                                                                            gene
                                                                                                                                                                                                                                                                                                                                                                  97US-0069426P.
98US-0070486P.
98US-0082167P.
                                                                                                                                                                                                                                                                                                                                           CORP
                                                                                                                                                                                                                                                                                                                                                                                                                         98WO-US026447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         for HPV 16
                                                                                                        259
                                                                                                                                                                                                                                            expression levels.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA;
                                                              100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%;
                                                                                                     A; 139 C; 170 G; 211 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B6/E7
                                                  0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ВÞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 28; DB
Pred. No. 0.4
0; Mismatches
                                                               Score 28; DB
Pred. No. 0.41
                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gene expression;
                                                                 0.41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BB
                                                                             2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                            Length 779;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 776;
                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              detection;
                                                  ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                               (Updated
                                                                                                                                                                                                                                                          γď
                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                         the
                                                                                                                                               8
                                                  0;
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DNA encoding

HPV 16 E6/E7 proteins obtd. by PCR

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                                                    Query Match
Best Local S
Matches 28
                                                                                                                                 The fragment of DNA contg. the HPV-16 B6/E7 coding region was prepd. by PCR from plasmid pBR322/HPV16 (Durst et al., PNAS, 80: 3812 (1983)) using oligonucleotides SO5 and SO6. The DNA prod. has a site for Nco1 at the beginning of the E6 gene and a Smal site immediately downstream of the termination codon for E7. The B6 and E7 ORFs are fused together to form a single continuous ORF via site directed mutagenesis and the immortilising potential of E7 is removed by altering two key codons of the HPV E7 sequence. The single ORF of HPV-16 B6/E7 may be inserted into vaccinia virus DNA at neutral sites (pref. by inserting two sets of the DNA in opposite orientations to overcome the problem of intertypic recombination) to make a recombinant virus vector for use immunotherapeutically to activate cells of the immune system against HPV. See also AQQ2935-400 and AAQ29450-69. (Updated on 25-MAR-2003 to correct PN field.) (Updated on 24-OCT-2003 to standardise OS field)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Virus vector; vaccinia virus; papillomavirus; HPV; human; amplification;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-OCT-1992.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               immunotherapeutic; ss.
                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                Disclosure; Fig la; 83pp; English.
                                                                                                                                                                                                                                                                                                                                                                              them, such as cervical cancer.
                                                                                                                                                                                                                                                                                                                                                                                          Recombinant virus vectors encoding human papillomavirus proteins - for treating and vaccinating against HPV infections and conditions caused
                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1992-349219/42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Boursnell MEG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (IMMU ) IMMUNOLOGY LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14-MAR-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10-MAR-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO9216636-A1
                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      papillomavirus type 16.
256
                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR27723,
                    GACATTATTGTTATAGTTTGTATGGAAC 28
                                                                                                          790 BP;
 GACATTATTGTTATAGTTTGTATGGAAC 283
                                                  100.0%;
ilarity 100.0%;
Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   91GB-00005383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               92WO-GB000424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Inglis SC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /*tag= e
/note= "third reading frame encoding HPV 16
485. .781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               note= "reading frame
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mote= "reading frame
                                                                                                           262 A; 144 C; 175 G; 209 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                *tag= a
note= "reading frame
                                                                                                                                                                                                                                                                                                                                                                                                                                      AAR27724, AAR27725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "second reading frame encoding HPV 16 E7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ۵
                                                    0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Munro AJ
                                                     Score 28; DB 2;
Pred. No. 0.41;
; Mismatches 0
                                                       0
                                                                                Length 790;
                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19
19
                                                       0
                                                        Gaps
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RESULT 18

RESULT 19
AAX78792
ID AAX78
XX
AC AAX78
XX
AC AAX78
XX
XX
XX
XX
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AAX78792;

AAX78792 standard;

DNA;

822

ВP

0

06-SEP-1999

(first entry)

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                                                    Query Match
Best Local Similarity
Matches 28; Conserv
                                                                                                                                            A variant of the human papilloma virus (HPV) E6 or E7 protein which elicits a humoral and/or cellular immune response against HPV can be used in vaccines against HPV or to treat HPV infection. The variant is preferably a deletion mutant comprising at least half, and preferably two thirds of full length E6 or E7 protein starting from the N- or C-thirds of full length E6 or E7 protein starting from the N- or C-terminal, or is a full length E6 moiety fused to a full length E7 moiety. The variant optionally has a linkage moiety and a foreign protein or peptide which facilitates the purification of, and enhances the immunogenicity of, the fusion protein. This sequence encodes a full length E6/E7 fusion protein. (Updated on 27-AUG-2003 to correct OS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-AUG-2003
10-JAN-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAT31833;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAT31833 standard; DNA; 801
                                                                                                       Sequence 801 BP; 266 A; 150 C; 174 G; 211 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                           Vaccine variants of human pa
E6 and/or E7 protein, pref.
prevent HPV infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human papilloma virus; E6; E7; deletion mutant; HPV; immune response;
humoral immune response; cellular immune response; vaccine; 88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human papilloma virus E6/E7 protein variant
                                                                                                                                                                                                                                                                                                   Example 1; Page 15-16; 37pp; English
                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1996-309518/31.
P-PSDB; AAR97561.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-DEC-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9619496-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human papillomavirus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    (UYQU ) UNIV QUI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20-DEC-1995;
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                             GACATTATTGTTATAGTTTGTATGGAAC 28
 GACATTATTGTTATAGTTTGTATGGAAC 278
                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                            Cox J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                    QUEENSLAND
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(first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /product= "E6/E7 fusion protein."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    *tag=
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                                                                  100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                            Webb
                                                                                                                                                                                                                                                                                                                                            papilloma virus antigens - c
f. deletion mutants, and are
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                                                     0,
                                                     Score 28; DB
Pred. No. 0.4
0; Mismatches
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                                                                    0.41;
                                                                                   DB
                                                                                2; Length 801;
                                                        0,
                                                                                                                                                                                                                                                                                                                                            contain variants of
a used to treat or
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AAX29781
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                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                AAX78791-X78801 represent nucleic acid sequences which encode novel constructs comprising an E6 or E7 protein or E6/E7 fusion protein from HPV (represented in AAY25375-Y25386). These constructs are optionally linked to an immunological fusion partner and an immunomodulatory CpG oligonucleotide. The products of the invention can be used to induce ar immune response in a patient to an HPV antigen. They can also be used if preventing or treating HPV induced tumours
 22-AUG-1997;
                      17-AUG-1998;
                                                04-MAR-1999.
                                                                                                      Human papillomavirus.
Haemophilus influenza
                                                                                                                                                        Chimeric;
                                                                                                                                                                              Prot.D1/3-E6-His/HPV16 coding sequence.
                                                                                                                                                                                                       17-OCT-2003
22-JUN-1999
                                                                                                                                                                                                                                            AAX29781;
                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 822 BP; 277 A; 147 C; 168 G; 230 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example II; Page 48; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Composition comprising induce immune response
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dalemans WLJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-DEC-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human papillomavirus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Fusion protein; immunological fu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HPV fusion protein D1/3-E6-His/HPV16 DNA
                                                                      WO9910375-A2
                                                                                                                                                                                                                                                                 AAX29781 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antigen; prevention;
                                                                                                                                                                                                                                                                                                                              569
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                                                                                                                                             lesion;
                                                                                                                                                                                                                                                                                                                                                                                          Similarity
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                                                                                                                                                                                                                                                                                                                             GACATTATTGTTATAGTTTGTATGGAAC 596
                                                                                                                                                        E6;
                                                                                                           influenzae.
                                                                                                                                                                                                                                                                                                                                                                            100.0%;
llarity 100.0%;
Conservative 0
                                                                                                                                                                                                      (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           n; E6 protein; E7 protein; E6/E7; immunomodulator; tumour; fusion partner; CpG oligonucleotide; immune response;
                                                                                                                                                        E7; fusion
 97GB-00017953
                        98WO-EP005285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gerard
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98WO-EP008563
                                                                                                                                            benign;
                                                                                                                                                                                                                                                                 DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g an E6, l
                                                                                                                                            malignant;
                                                                                                                                                                                                                                                                   822
                                                                                                                                                        protein;
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Pred. No. 0.41;
0; Mismatches
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                                                                                                                                                       protein
                                                                                                                                              virus;
                                                                                                                                            D; vaccine infection;
                                                                                                                                                                                                                                                                                                                                                                                                  2
                                                                                                                                                        vaccine;
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                                                                                                                                                        immunotherapy;
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Best Local !
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human papillomavirus type Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Fusion protein; vaccine; papilloma; cytostatic; virucide; uterine cervix tumor; E6; ds; gene; D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 822 BP; 277 A; 147 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This sequence represents the coding region for a chimeric E6 or E7 protein or E6/E7 fusion protein from Human papillomavirus (HPV) linked to protein or E6/E7 fusion partner, in this case, a fragment of the Haemophilus influenzae B protein D. The sequence also contains a histidine tag at the C-terminus of the encoded protein. The protein can be used in a vaccine, for immuno-therapeutically treating HPV induced tumour lesions (benign or malignant) and preventing HPV viral infection. (Updated on 17-OCT-2003 to standardise OS field)
                                                                           P-PSDB; AED52634.
                                                                                                   WPI; 2005-557648/57
                                                                                                                                                         Tyrrell AWR;
                                                                                                                                                                                                                                                             22-AUG-1997;
                                                                                                                                                                                                                                                                                                              24-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                 04-MAR-2005
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chimeric.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Haemophilus influenzae; strain 772.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Fusion protein D1/3-E6-His/HPV16, DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29-DEC-2005
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AED52633 standard; DNA; 822 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Fig 3; 95pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human Papilloma Virus (HPV) fusion proteins - us treatment or prophylaxis of HPV induced lesions.
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Lombardo-Bencheikh
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/product=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Fusion protein D1/3-E6-His/HPV16"
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Pred. No. 0.41;
0; Mismatches
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linked to
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RESULT 22
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                                                                                                                                                                                                        AAX78791-X78801 represent nucleic acid sequences which encode novel constructs comprising an E6 or E7 protein or E6/E7 fusion protein from HPV (represented in AAX75375-Y25386). These constructs are optionally linked to an immunological fusion partner and an immunomodulatory CpG oligonucleotide. The products of the invention can be used to induce an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 4; Fig 3; 96pp; English.
                                                                                       Sequence
                                                                                                                                                                               oligonucleotide. The products of the invention immune response in a patient to an HPV antigen.
                                                                                                                                                                                                                                                                                                                                                                                           Example
                                                                                                                                                                                                                                                                                                                                                                                                                                             Composition comprising induce immune response
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fusion protein; E6 protein; E7 protein; E6/E7; immunomodulator; tumour;
immunological fusion partner; CpG oligonucleotide; immune response;
HPV antigen; prevention; treatment; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HPV fusion protein CLYTA-E6-His/HPV16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           invention
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DB; AAY25379.
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                                                                                                                                                                                                                                                                                                                                                                                           VI; Page 52; 62pp; English.
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                                                                                                                                                or treating HPV
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100.0%;
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Pred. No. 0.41;
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   Score 28;
Pred. No.
                                                                                       209 G; 213 T; 0 U; 0 Other;
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                                                                                                                                                                                  They can also
                            Length 879
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                                                                                                                                                                                                                                                                                                                                                                                  This sequence represents the coding region for a chimeric E6 or E7 protein or E6/E7 fusion protein from Human papillomavirus (HPV) linked the an immunological fusion partner, in this case, a fragment of the streptococcus pneumoniae CLYTA protein. The sequence also contains a histidine tag at the C-terminus of the encoded protein. The protein can be used in a vaccine, for immuno-therapeutically treating HPV induced tumour lesions (benign or malignant) and preventing HPV viral infection. (Updated on 17-OCT-2003 to standardise OS field)
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                                                                                                                                                                                                                                                                                                                                       Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human Papilloma Virus (HPV) fusion proteins - useful in vaccines treatment or prophylaxis of HPV induced lesions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bruck C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-MAR-1999
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Streptococcus pneumor
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22-JUN-1999
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                                                                                                                                  GACATTATTGTTATAGTTTGTATGGAAC 653
                                                                                                                                                                               GACATTATTGTTATAGTTTGTATGGAAC 28
                                                                                                                                                                                                                                                                                                                                       879 BP; 289
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Pred. No. 0.42;
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linked to
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AED52641 standard; DNA; 879 BP

29-DEC-2005

(first entry)

AED52641;

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RESULT 25
AAD35101
ID AAD35
XX AD35
XX AD35
XX AD35
XX Human
XX Human
XX Alpha
KW Chera
XX Chera
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Best Local
                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human papillomavirus type Synthetic.
                                                                                                                                                                                                                                                                                                                                                              The invention relates to human Papilloma virus (HPV) fusion proteins, linked to an immunological fusion partner that provides T helper epitopes to the HPV antigen. Vaccine formulations comprising the fusion proteins are useful in the treatment or prophylaxis of HPV induced lesions (papillomas, warts and cervical cancer). HPV 16 (and HPV 18) E6 and E7 proteins (singly, as an E6-E7 fusion or mutated) were fused to either Haemophilus influenzae D protein (20-127), the C-terminus of Streptococcus pneumoniae Lyth protein (CLyth) or thioredoxin. The present sequence encodes an HPV-Lyth, fusion protein of the invention.
             EP1195438-A1
                                   Human papillomavirus.
                                                           Alphavirus vector therapy; vaccine;
                                                                                                 Human papillomavirus enh86,7 constrcut DNA.
                                                                                                                         25-JUL-2002
                                                                                                                                                 AAD35101;
                                                                                                                                                                       AAD35101 standard; DNA; 939 BP
                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 10; Fig 10; 96pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Vaccine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           P-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tyrrell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   04-MAR-2005.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IN9801903-I4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chimeric.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Fusion protein; virucide; uteri
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Fusion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (SMIK)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2005-557648/57.
DB; AED52642.
                                                                                                                                                                                                                                        626
                                                                                                                                                                                                                                                              μ
                                                                                                                                                                                                                                                                                       28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein cLytA-E6-His/HPV16,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AWR;
                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SMITHKLINE BEECHAM BIOLOGICALS.
                                                                                                                                                                                                                                                       GACATTATTGTTATAGTTTGTATGGAAC 28
                                                                                                                                                                                                                                      GACATTATTGTTATAGTTTGTATGGAAC 653
                                                                                                                                                                                                                                                                                                                                       879 BP; 289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               uterine
                                                                                                                                                                                                                                                                                      100.0%; ilarity 100.0%; Conservative (
                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              vaccine; property of the cervix
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97EP-00179535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98IN-CH001903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1. .879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /*tag= a
/product= "Fusion protein cLytA-E6-His/HPV16"
                                                            system; human papilloma virus; HPV; cervical cancer; virucide; cytostatic; ds.
                                                                                                                                                                                                                                                                                                                                       A; 168 C; 209 G; 213 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                papilloma;
tumor; E6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16
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                                                                                                                                                                                                                                                                                                   Score 28;
Pred. No.
                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cytostatic; papillomavirus infection; ds; gene; Lyth.
                                                                                                                                                                                                                                                                                                   0.42;
                                                                                                                                                                                                                                                                                                                DB 14;
                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                              Length 879;
                                                                                                                                                                                                                                                                                        Indels
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                                                                                                                                                                                                                                                                                       Gaps
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RESULT 26
AAQ08627
ID AAQ08
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Best Local S
Matches 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to an alphavirus vector system comprising nucleic acid derived from a human papilloma virus (HPV). The invention calls containing it, are used in treatment and prevention of cervical cancer, particularly as a vaccine. By selecting the nucleic acid that encode 86/87 proteins without ability to bind to pkb and p53, the risk that cells infected with the alphavirus vector system may become oncogenic is avoided (contrast use of other viral vectors). The present
                                                                                                                                  misc_binding
                                                                                                                                                                                                                                        Human papillomavirus type 16.
                                                                                                                                                                                                                                                                          HPV-18; HPV-16; amplification; primer; polymerase chain reaction; PCR;
                                                                                                                                                                                                                                                                                                HPV-16 fragment.
                                                                                                                                                                                                                                                                                                                         24-OCT-2003
21-APR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New alphavirus system, useful for genetic immunization against cervical cancer, comprises papilloma virus nucleic acid.
                     11-NOV-1988;
                                           11-NOV-1988;
                                                                  17-MAY-1990
                                                                                        DE3838269-A.
                                                                                                                                                                    misc_binding
                                                                                                                                                                                                     misc_binding
                                                                                                                                                                                                                                                                                                                                                           AAQ08627;
                                                                                                                                                                                                                                                                                                                                                                                 AAQ08627 standard; DNA; 1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sequence is Human papillomavirus enhE6,7 constrcut DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Regts DG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-OCT-2000; 2000EP-00203472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-APR-2002
(BEHW ) BEHRINGWERKE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (UYGR-) RIJKSUNIV GRONINGEN
                                                                                                                                                                                                                                                                                                                                                                                                                                         415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACATTATTGTTATAGTTTGTATGGAAC 28
                                                                                                                                                                                                                                                                                                                                                                                                                                         GACATTATTGTTATAGTTTGTATGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  939 BP; 284 A; 197 C; 217 G; 241 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Fig 19; 45pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Wilschut JC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000EP-00203472
                                                                                                                                                                                                                                                                                                                         (revised)
(first entry)
                     88DE-03838269
                                                                                                                                   /*tag= b
/note= "primer
658. .677
                                                                                                                                                                 /*tag= a
/note= "primer /
601. .620
                                            88DE-03838269
                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%;
                                                                                                               "primer (AAQ08630) binding site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Holtrop
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                                                                                                                                                                                                                                                                                                                                                                                  ВP
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Pred. No. 0.42;
                                                                                                                                                                                (AAQ08628) binding site"
                                                                                                                                               (AAQ08629)
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                                                                                                                                                                                                                                                                                                                                                                                                                                         442
                                                                                                                                               binding site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 939;
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Matches 28
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1990-156905/21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAN91784;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAN91784 standard; DNA; 1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cerutti P,
                                                                                   Sequence 1005 BP;
                                                                                                       Obtd. by cutting HPV16 with BamHI and PvuII. The patent describes probes (DNA or RNA) and their complements capable of detecting one or a combination of HPV types 6, 11, 16, 18, 31, 33 and 35. (Updated on 25-MAR -2003 to correct PR field.) (Updated on 27-AUG-2003 to correct OS field.)
                                                                                                                                                           Claim 40; Page 46; 81pp; English.
                                                                                                                                                                                 Rapid detection of specific human papilloma virus genotypes -
hybridisation of DNA digest with new labelled nucleic acid pr
                                                                                                                                                                                                                  WPI; 1989-324314/44.
                                                                                                                                                                                                                                     George AL, Groff DE;
                                                                                                                                                                                                                                                            (ONCO-) ONCOR INC.
                                                                                                                                                                                                                                                                               04-APR-1988;
31-MAR-1989;
                                                                                                                                                                                                                                                                                                                 04-APR-1989;
                                                                                                                                                                                                                                                                                                                                      19-OCT-1989.
                                                                                                                                                                                                                                                                                                                                                           WO8909940-A
                                                                                                                                                                                                                                                                                                                                                                              Human papillomavirus type 16.
                                                                                                                                                                                                                                                                                                                                                                                                     Cervical cancer
                                                                                                                                                                                                                                                                                                                                                                                                                         DNA probe
                                                                                                                                                                                                                                                                                                                                                                                                                                               16-MAR-1990
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25-MAR-2003
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785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ch 100.0%;
l Similarity 100.0%;
28; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4b;
                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GACATTATTATAGTTTGTATGGAAC 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GACATTATTGTTATAGTTTGTATGGAAC 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1000 BP; 340
             GACATTATTGTTATAGTTTTGTATGGAAC 28
 GACATTATTGTTATAGTTTGTATGGAAC 812
                                                                                                                                                                                                                                                                                                                                                                                                                          complementary to human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 of human papilloma virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Whitcomb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Page 4; llpp; German.
                                        100.0%;
llarity 100.0%;
Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                         (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                88US-00177404.
89US-00330381.
                                                                                                                                                                                                                                                                                                                 89WO-US001318.
                                                                                   325 A; 182 C; 190 G; 308 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; 171 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Zijlstra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0,
                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 28; DB 2;
Pred. No. 0.42;
                                                  Score 28; DB 1;
Pred. No. 0.42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       230 G; 259 T; 0 U;
                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                           papilloma virus type 16.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA amplification and analysis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              <u>,</u>
                                         0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 1000;
                                                              Length 1005;
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                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0 Other;
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                                          Gaps
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ARESULT 28
AAX78733
ID AAX78
AC AAX78
AC AAX78
AC AAX78
AC AAX78
AC AAX78
AC AAX78
AC AAX78
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CC COnse
PV CC Conse
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CC Colige
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RESULT 29
AAX29782
ID AAX29
XX AAX29
AC AAX29
AC AAX29
AC AAX29
CDT 17-OC
DT 22-JU
XX Chime
KW Chime
KW tumou
XX Tuman
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAX78791-X78801 represent nucleic acid sequences which encode novel constructs comprising an E6 or E7 protein or E6/E7 fusion protein from HPV (represented in AAY25375-Y25386). These constructs are optionally linked to an immunological fusion partner and an immunomodulatory CpG oligonucleotide. The products of the invention can be used to induce an immune response in a patient to an HPV antigen. They can also be used for preventing or treating HPV induced tumours
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAX78793;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          immunological
HPV antigen: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Fusion protein; E6 protein; E7 protein; E6/E7; immunomodulator; tumour;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HPV fusion protein D1/3-E6E7-His/HPV16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-SEP-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 1116 BP; 368 A; 208 C; 235 G; 305 T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example III; Page 49; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Composition comprising induce immune response
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dalemans WLJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  08-JUL-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human papillomavirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic
Human papillomavirus.
                                                 Chimeric; E6; E7; fusior tumour; lesion; benign;
                                                                                                                            Prot.D1/3-E6-E7-His/HPV16 coding sequence
                                                                                                                                                                          17-OCT-2003
22-JUN-1999
                                                                                                                                                                                                                                                        AAX29782;
                                                                                                                                                                                                                                                                                                      AAX29782 standard; DNA; 1116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (SMIK ) SMITHKLINE BEECHAM BIOLOGICALS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  unological fusion partner; CpG oligo
antigen; prevention; treatment; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1999-405485/34.
                                                                                                                                                                                                                                                                                                                                                                                                                             569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAY25377
                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACATTATTGTTATAGTTTTGTATGGAAC 28
                                                                                                                                                                                                                                                                                                                                                                                                                           GACATTATTGTTATAGTTTGTATGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                          (revised)
(first entry)
                                                                        E7; fusion protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gerard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97GB-00027262
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 t o
                                                 n protein; protein D; vaccine; immunotherapy; malignant; virus; infection; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HPV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
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                                                                                                                                                                                                                                                                                                         ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 28; DB 2
Pred. No. 0.42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CpG oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 2; Length 1116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           fusion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      immune response;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              from
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Best Local Similarity
                                                                                                                                            Haemophilus influenzae; strain 772
Human papillomavirus type 16.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This sequence represents the coding region for a chimeric E6 or E7 protein or E6/E7 fusion protein from Human papillomavirus (HPV) linked t an immunological fusion partner, in this case, a fragment of the Haemophilus influenzae B protein D. The sequence also contains a histidine tag at the C-terminus of the encoded protein. The protein can be used in a vaccine, for immuno-therapeutically treating HPV induced tumour lesions (benign or malignant) and preventing HPV viral infection. (Updated on 17-OCT-2003 to standardise OS field)
                                                                                                  CDS
                                                                                                                                                                                        Fusion protein; vaccine; virucide; uterine cervix
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human Papilloma Virus (HPV) treatment or prophylaxis of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bruck C, Cabezon S
Lombardo-Bencheikh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Haemophilus influenzae. Chimeric.
         24-AUG-1998;
                              04-MAR-2005.
                                                     IN9801903-I4.
                                                                                                                                    Chimeric.
                                                                                                                                                                                                                          Fusion protein D1/3-E6-E7-His/HPV16, DNA.
                                                                                                                                                                                                                                                 29-DEC-2005
                                                                                                                                                                                                                                                                       AED52637;
                                                                                                                                                                                                                                                                                            AED52637 standard; DNA; 1116
                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1116 BP; 368 A; 208 C; 235 G; 305 T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Fig 6; 95pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1999-190587/16
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                                                                                                                                                                                                                                                                                                                                                     569
                                                                                                                                                                                                                                                                                                                                                                                                   28;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SMITHKLINE BEECHAM BIOLOGICALS.
                                                                                                                                                                                                                                                                                                                                                                    GACATTATTGTTATAGTTTTGTATGGAAC 28
                                                                                                                                                                                                                                                                                                                                                     GACATTATTGTTATAGTTTGTATGGAAC 596
                                                                                                                                                                                           uterine cervix
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cabezon Silva T,
                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                (first
         98IN-CH001903
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98WO-EP005285
                                                                                                Location/Qualifiers
                                                                         /product= "Fusion protein D1/3-E6-E7-His/HPV16"
                                                                                                                                                                                                                                                entry)
                                                                                                                                                                                                                                                                                                                                                                                                           100.0%;
                                                                                                                                                                                        papilloma;
tumor; E7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              fusion proteins - useful in vaccines HPV induced lesions.
                                                                                                                                                                                                                                                                                                                                                                                                  0;
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                                                                                                                                                                                                                                                                                             ₽P
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Pred. No. 0.42;
                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                      cytostatic; papillomavirus infection; E6; ds; gene; D protein.
                                                                                                                                                                                                                                                                                                                                                                                                                       DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gerard CMG
                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                      Length 1116;
                                                                                                                                                                                                                                                                                                                                                                                                                                              U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                  Indels
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linked to
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RESULT 31
AAX78797
ID AAX78
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to human Papilloma virus (HPV) fusion proteins, linked to an immunological fusion partner that provides T helper epitopes to the HPV antigen. Vaccine formulations comprising the fusion proteins are useful in the treatment or prophylaxis of HPV induced lesions (papillomas, warts and cervical cancer). HPV 16 (and HPV 18) E6 and E7 proteins (singly, as an E6-E7 fusion or mutated) were fused to either Haemophilus influenzae D protein (20-127), the C-terminus of Streptococcus pneumoniae Lyth protein (CLyth) or thioredoxin. The present sequence encodes an HPV-H. influenzae D protein, fusion protein of the
                                                                                                                                                                                                                                                                                                   Fusion protein; E6 protein; E7 protein; E6/E7; immunomodulator; tum immunological fusion partner; CpG oligonucleotide; immune response; HPV antigen; prevention; treatment; ss.
                    Example VIII; Page 54-55; 62pp; English
                                           Composition comprising induce immune response
                                                                                                                                                                     24-DEC-1997;
                                                                                                                                                                                                                                                                               Synthetic
                                                                                                                                                                                                                                                                                                                                                                              06-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                             AAX78797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1116 BP; 368 A; 208 C; 235 G; 305 T; 0
                                                                                                                      Dalemans
                                                                                                                                                                                            18-DEC-1998;
                                                                                                                                                                                                                                           WO9933868-A2
                                                                                                                                                                                                                                                                 Human papillomavirus
                                                                                                                                                                                                                                                                                                                                                     HPV fusion protein CLYTA-E6E7-His/HPV16 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 6; Fig 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Vaccine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   P-PSDB; AED52638.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2005-557648/57.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (SMIK)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
es 28; Conserva
                                                                                 1999-405485/34.
DB; AAY25381.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         569
                                                                                                                                             SMITHKLINE BEECHAM BIOLOGICALS
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                                                                                                                     WLJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GACATTATTGTTATAGTTTGTATGGAAC 28
                                                                                                                                                                                                                                                                                                                                                                                                                             standard; DNA; 1173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GACATTATTGTTATAGTTTGTATGGAAC 596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Silarity 100.0%; IConservative 0;
                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                     Gerard
                                                                                                                                                                     97GB-00027262
                                                                                                                                                                                            98WO-EP008563
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                                                                                                                     CMG
                                             to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   English.
                                             E6, E7 or E6/E7
HPV.
                                                                                                                                                                                                                                                                                                                                                                                                                             ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 28; DB 1
Pred. No. 0.42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 14;
                                                         fusion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                               immunomodulator; tumour;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       U; 0 Other;
                                                        protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 1116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                         from HPV to
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AAX78791-X78801 represent nucleic acid sequences which encode novel

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RESULT 32
AAX29786
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Best Local S
Matches 28
                             Matches
                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  constructs comprising an E6 or E7 protein or E6/E7 fusion protein from HPV (represented in AAY25375-Y25386). These constructs are optionally linked to an immunological fusion partner and an immunomodulatory CpG oligonucleotide. The products of the invention can be used to induce an immune response in a patient to an HPV antigen. They can also be used fo preventing or treating HPV induced tumours
                                                                                                                         This sequence represents the coding region for a chimeric E6 or E7 protein or E6/E7 fusion protein from Human papillomavirus (HPV) linked to an immunological fusion partner, in this case, a fragment of the Streptococcus pneumoniae CLYTA protein. The sequence also contains a histidine tag at the C-terminus of the encoded protein. The protein can be used in a vaccine, for immuno-therapeutically treating HPV induced tumour lesions (benign or malignant) and preventing HPV viral infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 1173 BP; 380 A; 229 C; 276 G; 288 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human papillomavirus
Streptococcus pneumon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chimeric; E6; E7; fusion protein; CLYTA; vaccine; lesion; benign; malignant; virus; infection; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLYTA-E6E7-His coding sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-OCT-2003
22-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAX29786;
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                                                                                                                                                                                                                                               Disclosure;
                                                                                                                                                                                                                                                                       Human Papilloma Virus (HPV) fusion proteins - useful in vaccines treatment or prophylaxis of HPV induced lesions.
                                                                                                                                                                                                                                                                                                                                   WPI; 1999-190587/16.
                                                                                                                                                                                                                                                                                                                                                                           Bruck C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-MAR-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                    22-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-AUG-1998;
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                                                                                   Sequence 1173 BP;
                                                                                                                                                                                                                                                                                                                                                               Lombardo-Bencheikh
                                                                                                                                                                                                                                                                                                                                                                                                        (SMIK ) SMITHKLINE BEECHAM BIOLOGICALS.
                                                                                                                (Updated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            626 GACATTATTGTTATAGTTTGTATGGAAC 653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 GACATTATTGTTATAGTTTTGTATGGAAC 28
                             28;
  1 GACATTATTGTTATAGTTTGTATGGAAC 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                      AAY02637
                                                                                                                on 17-OCT-2003 to standardise OS field)
                                                                                                                                                                                                                                                                                                                                                                           Cabezon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                              Fig 14; 95pp; English.
                          100.0%;
llarity 100.0%;
Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               pneumoniae.
                                                                                                                                                                                                                                                                                                                                                                                                                                    97GB-00017953.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  98WO-EP005285
                                                                                                                                                                                                                                                                                                                                                                           Silva T,
                                                                                   380 A; 229 C; 276 G; 288 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%;
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Pred. No.
                                           Score 28; DB 2
Pred. No. 0.42;
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                             Mismatches
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                                                                                                                                                                                                                                                                                                                                                                             Gerard
                                                        2;
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                               Indels
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                                                                                                                                                                                                       E7
linked to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                               Gaps
                                                                                                                                                                                                                                                                                            for
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RESULT 34 AAF55127

AAF55127 standard; DNA; 7840

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AAF55127;

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                                              Query Match
Best Local S
Matches 28
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                                                                                                                The invention relates to human Papilloma virus (HPV) fusion proteins, linked to an immunological fusion partner that provides T helper epitopes to the HPV antigen. Vaccine formulations comprising the fusion proteins are useful in the treatment or prophylaxis of HPV induced lesions (papillomas, warts and cervical cancer). HPV 16 (and HPV 18) E6 and E7 proteins (singly, as an E6-E7 fusion or mutatted) were fused to either Haemophilus influenzae D protein (20-127), the C-terminus of Streptcoccus pneumoniae Lyth protein (CLyth) or thioredoxin. The present sequence encodes an HPV-Lyth, fusion protein of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Fusion protein; vaccine; papilloma;
virucide; uterine cervix tumor; E7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Fusion protein cLytA-E6-E7-His/HPV16, DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29-DEC-2005
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chimeric.
                                                                                            Sequence 1173 BP; 380 A; 229 C; 276 G;
                                                                                                                                                                                                                                                                                                                                                                         22-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                24-AUG-1998;
                                                                                                                                                                                                                                        Example 12; Fig 14; 96pp; English
                                                                                                                                                                                                                                                                                       P-PSDB; AED52646
                                                                                                                                                                                                                                                                                                   WPI; 2005-557648/57
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                                              100.0%; Score 28; DB 1 larity 100.0%; Pred. No. 0.42; Conservative 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Fusion protein cLytA-E6-E7-His/HPV16"
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Human papilloma virus; HPV; ribozyme; cleavage; E6; E7; keratinocyte; infection; genital warts; neoplasia; cervical cancer; warts; ds.
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02-JAN-1997
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                    Human papilloma virus 16 genomic DNA.
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                                                                                                                                                                          Complete cervical
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic ribozymes directed against human papilloma virus (HPV) 16 may be used to cleave HPV or to detect HPV in human tissue. The ribozymes cleave HPV to lower the production of the E6 and E7 proteins which play a key role in keratinocyte transformation. They can be used for the treatment of HPV infections which are associated with genital warts and genital neoplasms. In particular they can be used for the cervical cancer optionally with other agents such as cisplatin. Ribozymes are described in AAT40306-T40315. (Updated on 27-AUG-2003 to correct OS
                                                                                                                                                     Human
                                                                                                                                                                                                         Human papillomavirus type 16 E6 complete genome
                                                                                                                                                                                                                                25-MAR-2003
16-FEB-1998
                                                                                                                                                                                                                                                                 AAT94723;
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                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 25-29; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic ribozyme(s) treatment of cervical
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                                 mutation
                                                                                                TATA_signal
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                                                                                                                                                                         genome; circular; human papillomavirus type dysplasia; cervical cancer; cervical smear;
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/note= "E6
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83. .559
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65. .71
                                                                                                                        Location/Qualifiers
17. .23
           /note=
                    *tag=
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100.0%; Pred. No. 0.42;
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                                           "E6 transforming protein"
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Methods have been developed for distinguishing a subset of human CC papilloma virus (HPV) that is associated with an increased risk of developing cervical (HPV) that is associated with an increased risk of CC (1) preparing a cervical sample or cervical cancer. The methods involve: CC (1) preparing a cervical sample to expose any HPV-16 E6 gene in the CC sample and determining if the base at position 350 of the B6 gene (see CC AAT94723 and AAT94724 for comparison) is T or G, where the presence of GC at position 350 is associated with an increased risk of developing CC cervical dysplasia or cervical cancer; and (2) preparing a cervical sample to expose any HPV-16 E6 protein in the sample and determining if CC the amino acid at position 83 of the protein (see position 90 in AAW35741 CC and AAW35742 for comparison) is Val or Leu, where the presence of Val at CC position 83 that is associated with an increased risk of developing CC cervical dysplasia or cervical cancer. The present sequence represents CC correlates well with Pap scores; 3507:350G ratios among 45 HPV16 samples CC were 10.4 for negative Pap scores; 4:2 for CIN I, 1:6 for CIN III; 2:9 for CIN III; 0:3 for cancer. (Updated on 25-MAR-2003 to correct PF field.)
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/note= "L1 ORF from 5526 to 7154; putative"
7260. .7265
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/note= "L2_ORF from 4133 to 5656; putative"
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note= "El interrupted ORF from 85
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note= "E7_ORF_544_to 858; putative"
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note= "E2 ORF from 2725 to 3852;
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RESULT 38
AAV99946
ID AAV99

AAV99946 standard; DNA; 7904 BP.

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RESULT 37
AXX33881
ID AXX33881
XX AXX33
AC AXX33
XX 17-0C
DT 17-0C
DT 25-UT
XX HPV-1
XX HPV-1
XX HUMAN
XX WO991
XX WO991
XX USSI
XX USSI
XX USSI
XX Dipan
XX WPI;
XX Dipan
XX WPI;
XX Dipan
XX Disc
CC Intra
CC Hori
CC Stan
XX Seque
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Best Local Similarity
Matches 28; Conserv
                                                      Matches
                                                                                 Query Match
                                                                                                                                      This sequence represents a sequence from the HPV-16 genome. This invention relates to antisense oligonuclectide analogs (ONs) that have a sequence complementary to a sequence of nucleotides 415-445 of human papilloma virus-16 (HPV-16). The antisense ONs can be used to inhibit expression of HPV gene E6/E7 in living cells, preferably human keratinocytes or human cervical cells. They bind to E6/E7 mRNA in the cell, prevent mRNA translation and promote mRNA degradation by intracellular RNase H. They can be used for preventing transformation of living cells by HPV. The antisense ONs are used particularly for inhibiting the growth of cervical tumours. (Updated on 17-OCT-2003 to standardise OS field)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 7904 BP; 2601 A; 1377 C; 1509 G;
                                                                                                               Sequence 7904
                                                                                                                                                                                                                                                                                                                   Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                     Dipaolo J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             05-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HPV-16; inhibitor; antisense oligonucleotide;
keratinocyte; cervical cell; cervical tumour;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HPV-16 genomic sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-OCT-2003
25-JUN-1999
                                                                                                                                                                                                                                                                                                                                                             New antisense oligonucleotide analogs for inhibiting growth of cervical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          03-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO9913071-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human papillomavirus type 16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAX33881;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAX33881 standard; DNA; 7904 BP.
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                                                                      Local
 333
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                                                       28;
                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GACATTATTGTTATAGTTTGTATGGAAC 28
                            GACATTATTGTTATAGTTTGTATGGAAC 28
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GACATTATTGTTATAGTTTGTATGGAAC 360
                                                      Conservative
                                                                                                                                                                                                                                                                                                                   Page 28-32; 40pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                       Alvarez-Salas L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; ilarity 100.0%; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (revised)
(first entry)
                                                                                                               BP; 2601 A; 1377 C; 1509 G; 2417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97US-00929140.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98WO-US018320
                                                                   100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0,
                                                       0;
                                                                     Score 28;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 28; DB 2
Pred. No. 0.42;
; Mismatches
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                                                       Mismatches
                                                                     0.42;
                                                                                  DB
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                                                       0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           E6/E7 gene; human;
PCR primer; beta-actin; ss.
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                                                                                                               T; 0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                T; 0 U; 0 Other;
                                                                                  Length 7904;
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                                                         Indels
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                                                                                                               0 Other;
                                                       0
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                                                       Gaps
                                                         0
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RESULT 39
AAV99952
ID AAV99
XX
AC AAV99
XY
XZ
AC AAV99
XX
DT 26-AE
XX
XX
UCle
XX
Humar
                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                    This is the nucleotide sequence of the genome of the Human papillomavirus 16 used in the method of the invention involving human involucrin (hINV), in the production of a nucleotide sequence comprising the promoter sequences of the hINV gene. It can be used to direct the expression of nucleic acids in epithelial cells, particularly suprabasal epithelial cells. The nucleotide sequence can be used with human papillomavirus (HPV) oncogenes for producing transgenic animals which display cervical and epidermal hyperplasias as well as cancer of the traches, esophagus, colon, epidermis, anus/rectum, lymph nodes, spleen and lung. These animals provide useful models for the identification of potential carcinogens and co-carcinogens, identification of anti-neoplastic compounds, identification of genes which play a role in neoplastic progression of cancers of the trachea, esophagus, colon, epidermis, anus/rectum, lymph nodes, spleen, lung and cervix. The products can also be used for producing antisense molecules which can be used for reducing or preventing expression of a gene whose expression is controlled by the
                                                                                                                                                                                                                                                                                                            Query Match
Best Local S
Matches 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New isolated promoter sequences of human involucrin gene - used for specific expression of nucleic acids in epithelial cells, particularly for producing transgenic animals for use as models for cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; involucrin; hINV; promoter; epithelial cell; oncogene; suprabasal epithelial cell; human papillomavirus; HPV; transgenic animal; hyperplasia; cancer; carcinogen; ds.
   Human; involucrin;
                                                                                                                                                                                                                                                                                                                                                                                    Sequence 7904 BP; 2601 A; 1379 C; 1507 G; 2417 T; 0 U; 0 Other;
                                   Nucleotide sequence of the human papillomavirus 16.
                                                                           26-APR-1999
                                                                                                             AAV99952;
                                                                                                                                             AAV99952 standard; DNA; 7904 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure, Fig 2, 74pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24-MAR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9842826-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nucleotide sequence of the human papillomavirus 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAV99946;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1999-070069/06.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (RESE ) RESEARCH CORP TECHNOLOGIES INC
                                                                                                                                                                                                                                        333 GACATTATTGTTATAGTTTGTATGGAAC 360
                                                                                                                                                                                                                                                             1 GACATTATTGTTATAGTTTGTATGGAAC 28
                                                                                                                                                                                                                                                                                                              28,
                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                        sequence
                                                                                                                                                                                                                                                                                                              Conservative
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                                                                         (first
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hINV; transgenic
                                                                       entry)
                                                                                                                                                                                                                                                                                                                              100.0%; Score 28; DB 2; 100.0%; Pred. No. 0.42;
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                                                                                                                                                                                                                                                                                                              Mismatches
non-human; promoter; cancer;
                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                               Length 7904;
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ADA03127
ID ADA03
XX ADA03
XX ADA03
XX ADA03
XX ADA03
XX D6-NC
XX CYCU
DE HPV E
XX CYCU
CKW ANTIGE
KW Inhile
KW Inhile
KW matric
KW matric
KW matric
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KW matric
KW matric
KW MAIDS;
KW AIDS;
KW ANDS;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This is the nucleotide sequence of the human papilomavirus 16, involved CC in the method of the invention where the involucorin (hinv) gene is expressed by a transgenic non-human animal. The nucleotide sequence comprises the promoter of the hinv gene which directs the expression of nucleic acids in epithelial cells, particularly suprabasal epithelial cells. In particular when the NS directs the expression of oncogenes such as human papillomavirus (HPV) 16 oncogenes in transgenic animals, the animals display cervical and epidermal hyperplasias as well as cancer of the trachea, esophagus, colon, epidermis, anus/rectum, lymph nodes, colon, epidermis, anus/rectum, lymph nodes, colon, epidermis and co-carcinogens, colon, epidermis and co-carcinogens, colon, epidermis, anus/rectum, lymph nodes, esophagus, colon, epidermis, anus/rectum, lymph nodes, and co-carcinogens, colon, epidermis, anus/rectum, lymph nodes, spleen, lung, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
matrix metalloprotease; membrane metalloprotease; nuclear hormone receptor; transcription factor; vascular endothelial growth factor; p53; chrosomal translocation; leukaemia; androgen receptor; diagnosis; cancer; human papilloma virus; AIDS; BSE; CUD; macular degeneration; anglogenesis; diabetic retinopathy; psoriasis; rheumatoid arthritis.
                                                                                                             antidiabetic; antipsoriatic; antirheumatic; antiarthritic; inhibitor repression; inhibitor RNA; apoptosis; necrosis; differentiation; tumour cell division; BCL2 gene family;
                                                                                                                                                                    cytostatic; virucide; anti-HIV; neuroprotective; ophthalmological;
                                                                                                                                                                                                         HPV E6 sequence for inhibitor oligonucleotide repression method.
                                                                                                                                                                                                                                             06-NOV-2003
                                                                                                                                                                                                                                                                              ADA03127;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 7904 BP; 2601 A; 1379 C; 1507 G; 2417 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Fig 2; 77pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   epithelial cell; suprabasal epithelial cell; epidermal hyperplasia; human papillomavirus;
                                                                                                                                                                                                                                                                                                                  ADA03127 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cancer models.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New transgenic non-human animals - contain nucleic acid the control of the human involucrin gene promoter, used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1999-070068/06.
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                                                                                                                                                                                                                                                                                                                                                                                                            28;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ilarity 100.0%;
Conservative (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 28; DB 2;
Pred. No. 0.42;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
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RESULT 41
ADO58335
ID ADO58
                                                                                                                                                                                                                                                     The invention relates to double-stranded oligonucleotides consisting of CC two complementary strands (Ia, Ib), each having 1-5 unpaired nucleotides, CC at either at their 3' and 5' ends, forming single-stranded overhangs. One CC of (Ia) and (Ib) is complementary to a target sequence, (DNA or RNA). CC that is to be specifically repressed. The oligonucleotides are preferably cd double stranded inhibitor RNA molecules with a couple of thymidine bases CC that, when repressed, induce apoptosis, necrosis or differentiation of CC themour cells and/or inhibit division of such cells. Typical of many CC entering the couple of thymidine bases CC alpha transcription factor; sequence encoding various isoforms of the CC vascular endothelial growth factor; viral genes; genes that express a CC chromosomal translocation, e.g. where associated with leukaemia, and CC genes that express androgen receptors; a sequence encoding the Hifl-CC vascular endothelial growth factor; viral genes; genes that express a CC chromosomal translocation, e.g. where associated with leukaemia, and CC genes that express and cc expression of an analy or diagnosis, particularly of CC conditions caused by expression of a harmful gene or fusion protein, CC specifically cancer (e.g. associated with expression of mutant p53 or of CC conditions caused by expression of a harmful gene or fusion protein, CC and rheumatoid arthritis. They may also be used in vitro, e.g. for CC conditions and for establishing a genetic profile, for creating transplants and for establishing a genetic profile, for creating transplants and for establishing a genetic profile, for conditions contain only natural components (so will not induce components; contain only natural components (so will not induce components the human cc effectively than plasmids. This sequence represents the human cc effectively than plasmids. This sequence represents the human cc ells more deficients.
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                                                                                                                                                                           Matches
                                                                                                                                                                                                Query Match
Best Local
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10-APR-2002; 2002FR-00004474.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Fig 6A; 148pp; French
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New double-stranded oligonucleotides, useful e.g. for treatment and diagnosis of tumors, comprise complementary strands with single-stranded
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08-NOV-2002; 2002WO-FR003843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human papillomavirus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Harel-Bellan A, Ait-Si-Ali S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO2003040366-A2
                                                                                                                                                                                                                                                     Sequence 7904 BP; 2601 A; 1377 C; 1509 G; 2417 T; 0 U; 0 Other;
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                                                                                                                                                                                              ocal
                                                                                                                   1 GACATTATTGTTATAGTTTTGTATGGAAC 28
                                                                                                                                                                           28;
                                                                                                                                                                                                Similarity
                                                                                                                                                                         100.0%;
ilarity 100.0%;
Conservative 0
                                                                                                                                                                         0,
                                                                                                                                                                                              Score 28; DB 8
Pred. No. 0.42;
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                                                                                                                                                                           Mismatches
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00
                                                                                                                                                                           0;
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ADO58335 standard; DNA; 7904 BP

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RESULT 42
ADZ45647
ID ADZ45
XX
AC ADZ45
XX
DT 30-JU
XX
DE Humar
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                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                      cc system contains a desired foreign gene in virus-like particles consisting cc of only viral structure proteins, wherein the viral structure protein is capsid protein L1 derived from human papillomavirus(HPV); the foreign gene is associated with immunity; and the foreign gene associated with cc immunity is selected from the group consisting of cytokine gene, cc clal cycle participating gene p21 and angiogenesis inhibitor flk-l. The cc method for producing the gene delivery system containing the desired cc foreign gene comprises the steps of: treating the virus-like particles contained foreign gene into the unit capsomer proteins; adding to react; and removing the reducing agent to refold the unit capsomer corotein. This sequence represents Human papillomavirus type 16 (HPV16) L1 capsid protein DNA.
                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention describes a gene delivery system containing a desired foreign gene in virus-like particles. The desired foreign gene can be stably delivered into a cell without being decomposed by nucleases and the desired foreign gene also stable in vivo because the virus-like particles do not have nucleic acids derived from virus. The gene delivery
Human papillomavirus type 16 full length genomic clone - SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              capsid protein; L1; human papillomavirus; HPV; immunity; cytokine;
chemokine; nterleukin-2; IL-2; tumour suppressor gene H19; cell cycle;
p21; angiogenesis inhibitor; flk-1; capsomer; HPV16; gene; ds.
                                                                                                                                                                                                                                                                                                                         Sequence 7904 BP; 2601 A; 1377 C; 1509 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human papillomavirus type 16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human papillomavirus type 16 L1 capsid protein DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15-JUL-2004
                                  30-JUN-2005 (first entry)
                                                                                                   ADZ45647 standard; DNA; 7904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 1; SEQ ID NO 1; 16pp; Korean.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gene delivery system containing desired foreign gene in virus-like
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kim JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        03-MAY-2001; 2001KR-00024124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         03-MAY-2001; 2001KR-00024124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KR2002084620-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gene delivery system; virus-like particle; viral structure protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADO58335;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (OHYK/) OH Y K.
                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                                       333
                                                                                                                                                                                                                        1 GACATTATTGTTATAGTTTGTATGGAAC 28
                                                                                                                                                                                       GACATTATTGTTATAGTTTTGTATGGAAC 360
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                                                                                                                                                                                                                                                          Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       유
                                                                                                                                                                                                                                                                         100.0%; Score 28; DB 11; 100.0%; Pred. No. 0.42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     X,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Shin GS,
                                                                                                                                                                                                                                                          0;
                                                                                                    ВP
                                                                                                                                                                                                                                                            Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17
                                                                                                                                                                                                                                                                                                                             2417 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                           Length 7904;
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                                                                                                                                                                                                                                                        Gaps
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RESULT 43
ABQ73530/c
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Best Local
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07-OCT-2003;
13-FBB-2004;
                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention comprises a composition for the detection of cancer markers, the composition contains a nucleic acid molecule which is substantially identical to a full length genomic clone of a human papilloma virus (type 11, 16, 18, 51, 56, 58, 66, 70, or 73). The composition of the invention is useful for diagnosing cancer or the risk of developing cancer, in particular cervical, anal, colon and HPV-related cancer. The present DNA sequence represents a human papilloma virus full length genomic clone of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New composition having a nucleic acid molecule identical to genomic clorof human papilloma virus 16, 18 or 51, useful in diagnosing cancer or the tisk of developing cancer, in particular cervical, anal, colon and HPV-related cancer.
                                                                       Human papillomavirus. Synthetic.
                                                                                                                        Pre-trans-splicing molecule; PTM; spliceosome; cytostatic; gene therapy; immunosuppressive; antimicrobial; gene regulation; gene repair; cancer; targeted cell death; genetic disorder; infectious disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    tumor marker; genome; diagnosis; cancer; uterine cervix tumor;
rectal tumor; colon tumor; ds.
                                                                                                                       immunosuppressive;
targeted cell deatl
                                                                                                                                                                                                  02-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 7904 BP; 2601 A; 1377 C; 1509 G; 2417 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2005-285441/29.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   04-OCT-2004;
08-JAN-2002; 2002WO-US000416
                                                                                                            autoimmune disease; proliferative disorder;
                                                                                                                                                                          HPV-PTM
                                                                                                                                                                                                                           ABQ73530;
                                                                                                                                                                                                                                                   ABQ73530 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lindberg
                        11-JUL-2002.
                                                 WO200253581-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (DAKO-)
                                                                                                                                                                                                                                                                                                                                                                                           Match
                                                                                                                                                                                                                                                                                                                  333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1; SEQ ID NO 1; 169pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           papillomavirus type 16.
                                                                                                                                                                                                                                                                                                                                                                               Similarity
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                                                                                                                                                                          related oligonucleotide
                                                                                                                                                                                                                                                                                                                                GACATTATTGTTATAGTTTGTATGGAAC 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <u>`</u>3
                                                                                                                                                                                                                                                                                                                GACATTATTGTTATAGTTTGTATGGAAC 360
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W, Yoast S;
                                                                                                                                                                                                                                                                                                                                                                  Conservative
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2003US-0509205P.
2004US-0543925P.
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                                                                                                                                                                                                  entry)
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Pred. No. 0.42;
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                                                                                                                                                                          #2.
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                                                                                                                                                                                                                                                                                                                                                                                            7904;
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RESULT 44
ADC37149
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18-DEC-2003

(first entry)

HPV16

subgenomic fragment DNA sequence.

ADC37149 standard;

DNA; 459

screening cancer chemotherapeutic; antineoplastic activity; carcinogenicity; neuroprotective; neurodegeneration; SV40; Simian Virus 40; adenovirus; human papilloma virus; E6; E7;

E7; cytostatic,

immortalised non-tumourigenic; human Schwann; schwannoma cell line;

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GACATTATTGTTATAGTTTTGTATGGAAC 28

GACATTATTGTTATAGTGTGTATGGAAC

2

88 μ Query Match Best Local S Matches 27

l Similarity 27; Conserv

Conservative

0

94.38;

Score 26.4; DE Pred. No. 1.6; 0; Mismatches

9 0

μ,

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Gaps

0

Sequence

149

B₽;

54 A; 32

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12

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51 T;

0 U; В

Other; Length Indels

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The present invention describes a cell (I) comprising pre-trans-splicing compoleules (PTMs) (II) which have one or more target binding domains (IIa) that target binding of PTM to pre-mRNA, 3' splice region (IIb) that coincludes branch point pyrimidine tract and 3'splice acceptor site, or 5' ce spliced to target pre-mRNA, Optionally, that separates RNA splice site (IIc), spacer region (IId) that separates RNA splice site cell comprises; (A) (IIb) and (IIe); or (B) (IIC), (IId) and (IIe). The cell comprises a recombinant vector expressing (II). (I) has cytostatic, cell may comprise a recombinant vector expressing (II). (I) has cytostatic, cell composuppressive and antimicrobial activities, and can be used in gene therapy. (II) comprising one or more (preferably two or more) (IIa) and (IIe), or (II)), (IId) and (IIe), or (II) comprising either (A) or (B) (C) (excluding (IId)), is useful for producing a chimeric RNA molecule in a cell which involves contacting a target pre-mRNA expressed in the cell with (II) that is recognised by nuclear splicing components. The chimeric CRNA produced using (II) which esquences encoding a toxin or translatable comprises nucleotide sequence to be trans-spliced to target pre-mRNA cell produced using (II) which either comprises (A) or (B) further comprises a nucleotide sequence regulator (CFR). The chimeric RNA molecule produced using (II) which either comprises (A) or (B) further comprises and targeted cell death. (I) can be used for gene regulation, of ceremition of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mitchell LG,
Mansfield GS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-JAN-2001;
08-JAN-2001;
08-JAN-2001;
20-APR-2001;
29-AUG-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel cell having pre-trans-splicing molecules with target binding domains that target binding of PTM to pre-mRNA, 3' or 5' splice respacer region, nucleotide sequence to be trans-spliced to target-p
                                       exemplification of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-566693/60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (INTR-) INTRONN INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Fig 52; 229pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; 2001US-00756095.
; 2001US-00756096.
; 2001US-00756097.
; 2001US-00838858.
; 2001US-00941492.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               García-Blanco
Chao H;
                                          the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ₹,
                                            invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Baker
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   splice region,
target-pre-
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RESULT 45
AAL54445
                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to a the production of an immortalised non-
CC tumourigenic human Schwann or schwannoma cells, introducing a
cell culture of human Schwann or schwannoma cells, introducing a
comprising an exogenous immortalising gene into the cells,
comprising gene and retain phenotypic properties of Schwann or
comprising gene and retain phenotypic properties of Schwann or
comprising cancer chemotherapeution further comprises determining the effect
comprising cancer chemotherapeutic and antineoplastic activity of an agent
comprising cancer chemotherapeutic and antineoplastic activity of an agent
comprising cancer chemotherapeutic and antineoplastic activity of an agent
comprising cancer chemotherapeutic and antineoplastic activity of an agent
comprising the pharmacological agent on schwannomas cells. In the method
comprising an immortalised non-tumourigenic human Schwann or schwannoma
cell line, the polymuclectide is a subgenomic fragment of a virus
consisting of SV40 (Simian Virus 40), adenovirus and human papilloma
comprising the E6 and E7 genes of the human papilloma virus
consisting of types 18, 31, 33 or 35, but preferably 16. The immortalised
non-tumourigenic human Schwann or schwannoma cell line has cytostatic and
compositing of types 18, 31, 33 or 35, but preferably 16. The immortalised
consisting of types 18, 31, 33 or 35, but preferably 16. The immortalised
consisting of types 18, 31, 33 or 35, but preferably 16. The immortalised
constituted is useful for producing an immortalised non-
constitute activity of an agent testing
concer chemotherapeutic and antineoplastic activity of an agent, testing
cancer chemotherapeutic and antineoplastic activity of an agent, testing
concerningenicity of an agent and schwannoma cell line eactivity of
consisting of subject and second concern. This polymuclectice activity of
consisting the disorders and cancer. This polymuclectice activity of
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consisting the disorders and cancer. This polymuclectid
X R X R X U
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Best Local Similarity
Matches 27; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Producing an immortalized non-tumorigenic human Schwann or schwannoma cell line for treating cancer or neurodegenerative disorder comprises selecting for immortalized cells that express the exogenous immortalizing
                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                  03-APR-2003
                                                                                                   AAL54445 standard; DNA; 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; SEQ ID NO 1; 29pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-MAR-2002; 2002US-0361528P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-MAR-2003; 2003WO-US006314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO2003073996-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human papillomavirus type 16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gene therapy; cancer; HPV16; ds
                                                          AAL54445;
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                                                                                                                                                                                                                                                                                                                                                                                       459
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                                                                                                                                                                                                                GATATTATTGTTATAGTTTGTATGGAAC 258
                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                     BP; 157 A; 71 C; 100 G; 131 T; 0 U; 0 Other;
                  (first entry)
                                                                                                                                                                                                                                                                                                                   94.3%;
                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                     Score 26.4; DB 10;
Pred. No. 1.6;
                                                                                                                                                                                                                                                                                                                                          Length 459;
                                                                                                                                                                                                                                                                                                 0
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RESULT 46
ARASILI3
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                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to a novel method for selective post-translational CC silencing in a mammalian cell of the expression of an exogenous gene of CC viral origin. The method comprises introducing into the cell a small CC interfering RNA (siRNA) construct that is homologous to a part of the RNAA sequence of the gene. The method is useful for the selective post-CC transcriptional silencing of an exogenous gene of viral origin (e.g. an CC compose or human papilloma virus (HPV) gene) in a mammalian cell. The CC method or the siRNA is particularly useful for treating cancer, human CC cervical cancer, human immunodeficiency virus (HIV), smallpox, flu, CC compon cold, or a disease caused by a HPV (e.g. genital warte, cervical CC vilgaris). An siRNA construct or vector is useful for use as a medicament CC for the diseases mentioned. The polynucleotide sequence of the invention CC can be used to treat disorders by gene therapy. This polynucleotide of the invention CC sequence represents the DNA of a HPV siRNA sequence of the invention
                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Delivery mechanism; gene therapy; cytostatic; vulnerary; virucide, injury; infection; cancer; gastrointestinal disease; gyneocology and obstetrics; tumor; colorectal tumor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Virucide; cytostatic; anti-HIV; dermatological; small interfering RNA; selective post-translational silencing; siRNA; oncogene; genital wart; human papilloma virus; HPV gene; cancer; human cervical cancer; HIV; smallpox; flu; common cold; cervical cancer; penile cancer; malignant squamous cell carcinoma; verruca vulgaris; gene therapy; ds.
                                                                                                                  11-AUG-2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Selective post-transcriptional silencing of an exogenous viral gene (e.g. human papilloma virus (HPV) E6), for treating e.g. cancer, comprises using a small interfering RNA (siRNA) construct homologous to an mRNA of
                                                                            Human papillomavirus type 16 E6/E7 gene fragment,
                                                                                                                                                                                               AEA51113 standard; DNA; 477
                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 477 BP; 167 A; 75 C; 104 G; 131 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-JUL-2001; 2001GB-00017358.
14-JAN-2002; 2002GB-0000688.
17-JUN-2002; 2002GB-00013855.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 11; Fig 11; 44pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-221850/21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2003008573-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-JUL-2002; 2002WO-GB003300
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention relates to a method and composition comprising a transfer agent and a solid or colloidal carrier medium for delivering biological agents into cells. The invention is useful for the treatment of cancer, tumor, carcinoma of cutaneous, squamous or cervical epithelia and colorectal carcinoma, wounds, burns and scars. The invention is also useful in gene therapy. The present sequence is the human papillomavirus type 16 86/87 gene fragment. This sequence is useful in a method for treating carcinomas.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Composition useful for delivering an agent into a cell comprises the agent, a transfer agent and a solid or colloidal carrier medium.
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05-MAR-2004; 2004US-0549919P.
                                                                                                                                    24-APR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                    Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    human papillomavirus; cervix cancer; ds
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADF31984;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2005-405310/41
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                                                                               24-APR-2002; 2002CN-00117143
                                                                                                                                                                                             27-NOV-2002.
                                                                                                                                                                                                                                                   CN1381583-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12-FEB-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       papillomavirus fusion gene encoding
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                                                                                                                                       2002CN-00117143
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/*tag=
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Pred. No. 1.6;
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Best Local Similarity
Matches 27; Conserv
                                                                                                                                                                                                                                                                                                                                                              Human papillomavirus type synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                E6 protein; E7 protein; fusion protein; HPV16; HPV-associated cancer; cervical cancer; immune response; lower gastrointestinal tract cancer anal cancer; reproductive system cancer; penile cancer; vulvar cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 543 BP; 185 A; 89 C; 118 G; 151 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention relates to human papillomavirus E6/E7 fusion gene, its preparing process, the process for configuring the efficient expression carrier containing the gene and resultant expression carrier, the fusion protein prepared from the gene, and the application of the fusion gene and expression protein to medical science and medicine to treat cervix cancer are disclosed. The present sequence represents the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human papillomavirus {\tt E6/E7} fusion gene and its efficient expression carrier and fusion protein vaccine.
                                                                                                                                                                                                                                                                                                                         CDS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADO44067;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADO44067 standard; DNA; 747
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Zhao
                                  New polypeptide comprising human papillomavirus E6 and E7 polypeptides, useful for treating or preventing human papillomavirus (HPV)-associated cancers, e.g. cervical cancer.
                                                                                                                                Smith L,
                                                                                                                                                                                     03-OCT-2002; 2002US-0415929P
                                                                                                                                                                                                               02-OCT-2003; 2003WO-US031726.
                                                                                                                                                                                                                                          15-APR-2004.
                                                                                                                                                                                                                                                                   WO2004030636-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nucleotide sequence of an E7E6 fusion protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       human papillomavirus fusion gene encoding sequence.
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                                                                                          P-PSDB; ADO44066.
                                                                                                                                                          (AMHP ) WYETH HOLDINGS CORP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     251 GACATTATCGTTATAGTTTGTATGGAAC 278
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                                                                                                                                 Cassetti MC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
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                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                               product= "E7E6 fusion protein"
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Pred. No. 1.
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Example 1; Page 73; 101pp; English

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Best Local Similarity
Matches 27; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present sequence encodes an E7E6 fusion protein, comprising wild type E7 and E6 polypeptides from human papillomavirus type 16 (HPV16). The specification describes human papillomavirus E6 and E7 polypeptides, where the E7 polypeptide has mutations at any one or more of the amino acids corresponding to amino acids 24, 26 or 91 of the sequence given in ADO44073 and the E6 polypeptide has no mutations or has mutations at any one or more of the amino acids corresponding to amino acids or 106 of there sequence given in ADO44072. The polypeptides of the invention are useful for treating or preventing human papillomavirus (HPV)-associated cancers, such as cervical cancer. The fusion proteins and nucleic acids encoding the fusion proteins are useful for generating immune responses against HPV. They are also useful for treating lower gastrointestinal tract cancers, e.g. anal cancer, and other cancers of the reproductive exercise are cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    E6 protein; E7 protein; fusion protein; HPV16; HPV-associated cancer; cervical cancer; immune response; lower gastrointestinal tract cancer; anal cancer; reproductive system cancer; penile cancer; vulvar cancer;
                                                                                                                                                                                                   New polypeptide comprising human papillomavirus E6 and useful for treating or preventing human papillomavirus cancers, e.g. cervical cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human papillomavirus type 16 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Smith L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gene; ss.
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The present sequence encodes a fusion protein, polypeptides from human papillomavirus type 16 protein is designated E6E7PentM, and comprises

comprising E6 and E7 (HPV16). The fusion an E6 amino terminus

₽7

New polypeptide comprising human papillomavirus E6 and E7 polypeptides, useful for treating or preventing human papillomavirus (HPV)-associated cancers, e.g. cervical cancer.

The present sequence encodes an E6E7 fusion protein, comprising wild type E6 and E7 polypeptides from human papillomavirus type 16 (HPV16). The

Example 1; Page 68; 101pp; English.

terminus

Page 71; 101pp; English.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (where residues 63 and 106 have been replaced with glycine) and an E7 carboxy terminus (where residues 24, 26 and 91 have been replaced with glycine). E6E7PentM is representative of fusion proteins of the invention. The specification describes human papillomavirus E6 and E7 polypeptides, where the E7 polypeptide has mutations at any one or more of the amino acids corresponding to amino acids 24, 26 or 91 of the sequence given in ADO44073 and the E6 polypeptide has no mutations or has
                                                                                                                                                                             Smith L,
                                                                                                                                                                                                                                                                                                                                                                                                                                          Human papillomavirus type 16. Synthetic.
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specification describes human papillomavirus 86 and 87 polypeptides, where the 87 polypeptide has mutations at any one or more of the amino acids corresponding to amino acids 24, 26 or 91 of the sequence given in ADO44073 and the 86 polypeptide has no mutations or has mutations at any one or more of the amino acids corresponding to amino acids 63 or 106 of there sequence given in ADO44072. The polypeptides of the invention are useful for treating or preventing human papillomavirus (HPV)-associated cancers, such as cervical cancer. The fusion proteins and nucleic acids encoding the fusion proteins are useful for treating immune responses against HPV. They are also useful for treating lower gastrointestinal tract cancers, e.g. anal cancer, and other cancers of the reproductive system, including penile and vulvar cancer.

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AUTHORS
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fc2102.e Rose Petals
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Rosa hybrid cultivar
                                                                                                                                                                                                                                                             Faculty of Agricultural, Food and Environmental Quality Sciences, The Hebrew University of Jerusalem P.O. Box 12, Rehovot, 76100, Israel Tel: 972 8 9489 683
Fax: 972 8 9468 265
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BQ106475.1 GI:20156137
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primer: T3 forward.
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                                                                                                                                                               Location/Qualifiers
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fz14f07.y
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fy06g11.y
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fx10d12.y
fx14c11.y
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Opisthorchis viverrini
Eukaryota; Metazoa; Platyhelminthes; Trematoda; Digenea;
Opisthorchida; Opisthorchiata; Opisthorchioidea; Opisthorchidae;
Opisthorchis.
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        AQ778171
HS_3206_A1_B05_MR_CIT
sapiens genomic clone
                                                                                                                                  N
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Pax: 1 504 988 6686

Email: paul.brindley@tulane.edu
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PO26 Opisthorchis viverrini lambda
viverrini cDNA 5', mRNA sequence.
DN832021
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Unpublished (2005)
Contact: Brindley, PJ
                                                                                                                                                                                                                                                                                                                                                                                 Seq prime:
POLYA=Yes
                                                                                                                                                                                                                                                                                                                                                                                           Insert Length: 486 Std Error: 0. Seq primer: 5' TriplEx sequencing
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Department of Tropical Medicine
Tulane University, Health Science
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/mal_type="mRWA"

/strain="Khon Kaen Province, Thail

/db_xref="taxon:6198"
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AQ778171
AQ778171.1
                                                                                                                                            Sorghum bicolor (sorghum)
Sorghum bicolor
Sorghum bicolor
Eukaryota, Viridiplantae, Streptophyta, Embryophyta, Tracheophyta,
Spermatophyta, Magnoliophyta, Liliopsida, Poales, Poaceae, PACCAD
clade, Panicoideae, Andropogoneae, Sorghum.
1 (bases 1 to 658)
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Plate: 3206 row: C column: 9
Seq primer: M13 Reverse
Class: BAC ends
                                                      Bedell, J.A., Budiman, M.A., Nunberg, A., Citek, R.W., Robbins, D., Jones, J., Flick, E., Rohlfing, T., Fries, J., Bradford, K., McMenamy, J., Smith, M., Holeman, H., Roe, B.A., Wiley, G., Korf, I.F., Rabinowicz, P.D., Lakey, N., McCombie, W.R., Jeddeloh, J.A. and
                                                                                                                                                                                                                                                                                                                                                       CW302859 658 bp DNA linear GSS 31-OCT-2004 104 787 11464939 116 35676 078 Sorghum methylation filtered library (LibID: 104) Sorghum bicolor genomic clone 11464939, genomic survey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tel: (206) 616-3618
Fax: (206) 616-3887
Email: jwallace@u.washington.edu
Clones may be purchased from Research Genetics (info@resgen.com).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          scanning the human genome Proc. Natl. Acad. Sci. U.S.A. 96 (17), 9739-9744 (1999)
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1 (bases 1 to 499)

Mahairas,G.G., Wallace,J.C., Smith,K., Swartzell,S.,
Mahairas,G.G., Wallace,J.C., Smith,K., Swartzell,S.,
Keller,A., Shaker,R., Furlong,J., Young,J., Zhao,S.,
Sorghum genome sequencing by methylation filtration PLOS Biol. 3 (1), e13 (2005)
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                         Martienssen, R.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        401 Queen Anne Avenue North, Seattle,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Contact: Mahairas GG, Wallace JC,
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Location/Qualifiers
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/db_xref="taxon:9606"
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Pred. No. 9.7e+02;
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cDNA Library construction by: Joe Barnes and Steve Johnson. DNA Sequencing by: Washington University Genome Sequencing Center Clone distribution: Research Genetics web address: http://www.researchgenetics.com/ putative full length read The vector to vector length is 262 rebrafish identity (p-value greater than le-99) found to: gi|3461292|gb|AI105787|AI105787 db03d09_p1 ZF adult heart library
                                                                                                                                                                                                                                                                                                                                                                                            Eddy, S., Hiller, L., Kucaba, T., Martin, J., Beck, C., Wylie, T. Underwood, K., Steptoe, M., Theising, B., Allen, M., Bowers, Y., Person, B., Swaller, T., Gibbons, M., Pape, D., Harvey, N., Schun Ritter, B., Kohn, S., Shin, T., Jackson, Y., Cardenas, M., McCann Waterston, R. and Wilson, R. WashU Zebrafish EST Project 1998
Unpublished (1998)
Contact: Stephen L. Johnson
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, Usi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes; Cyprinidae; Danio.

1 (Dases 1 to 261)

Clark, M., Johnson, S.L., Lehrach, H., Lee, R., Li, F., Marra, M., Eddy, S., Hiller, L., Kucaba, T., Martin, J., Beck, C., Wylle, T., Wylle, T., Wylle, T., Wylle, T., Wylle, T., Wylle, T.,
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4041 Forest Park Ave,
Tel: 314 615 6979
Fax: 314 615 5975
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                                                                                                                                                                                                                                                                                                  Tel: 314 286 1800
Fax: 314 286 1810
Email: zbrafish@watson.wustl.edu
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plate: 787 row: d column: 19
Seq primer: T3 Reverse
Class: methylation filtered
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15660154
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cultivar="ATx623"
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Pred. No. 1.4e
0; Mismatches
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embryo Danio rerio
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BM531805
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fx91d07.yl Zebrafish SJD 2 day e.
IMAGE:5630652 5', mRNA sequence.
BM531805
                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes; Cyprinidae; Danio.

1 (bases 1 to 324)

1 (bases 1 to 324)

1 (clark, M., Johnson, S.L., Lehrach, H., Lee, R., Li, F., Marra, M., Eddy, S., Hillier, L., Kucaba, T., Martin, J., Beck, C., Wylie, T., Underwood, K., Steptoe, M., Theising, B., Allen, M., Bowers, Y., Person, B., Swaller, T., Gibbons, M., Pape, D., Harvey, N., Schurk, R., Ritter, B., Kohn, S., Shin, T., Jackson, Y., Cardenas, M., McCann, R., Waterston, R. and Wilson, R.
Tel: 314 286 1800
Fax: 314 286 1810
Email: zbrafish@watson.wustl.edu
Email: zbrafish@watson.wustl.edu
cDNA Library construction by: Joe Barnes and Steve Johnson. DNA
Sequencing by: Washington University Genome Sequencing Center Clone
distribution: RessourcenZentrumPrimarDatenbank, Berlin, Germany
                                                                                                                                             WashU Zebrafish EST Project 1998
Unpublished (1998)
Contact: Stephen L. Johnson
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Danio rerio (zebrafish)
Danio rerio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Danio rerio
Seq primer:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5'-aggactegtaacaacggagtacttt-ttttttttttvn-3'. cDNA was subsequently amplified in a 7-cycle PCR with the following primers: 5'-ggccgctaatacgactcactatag-3'
5'-agcagtegt-aacaacgcag. Deoxy-UMP adaptors were added in a third PCR (5 cycles) and the primers
5'-caucaucaucaucaucagccgctaatacgactcactataggg-3' and 5'-cuaucaucaucaucagccgctaatacgactcactataggg-3' and 5'-cuaucaucaucaucaucagtcggtacaacaacgcagagtac-3'. Ends were treated with uracil DNA glycosylase and product with 3' overhangs was annealed to complementary ends of pAMP1. Insert can be excised using EcoRI and NotI. Library constructed by Joe Barnes and Steve Johnson (Washington University)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /tissue_type="embryo, 14 somite"
/lab host="DHIOB"
/clone lib="Zebrafish C32 14 somite embryo"
/note="Vector: pAMP1; Site_1: EcoRI; Site_2: Not
strand cDNA synthesis was primed using oligo-dT
magnetic beads with an additional primer
5'-gcggcgctaatacgactcacta-taggg-3'. Second stra
synthesis was a 3-cycle PCR using the primers
5'-gcgccgctaatacgactcactatag-3'
1'secoctatacagactcactatag-3'
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|mol_type="mRNA"
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85.2%;
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Pred. No. 2.3e+03;
0; Mismatches 4
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                                                                                                                                                     St. Louis, MO 63108,
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o rerio cDNA clone
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                                                                                                                                                                                                                                  Pecora; Bovidae; Bovinae; Bos.

1 (bases 1 to 499)

Olsaker,I. and Laerdahl,J.K.

Production of ESTs from a cDNA library of flushed bovine preimplantation embryos

Unpublished (2005)
                                    Email: ingrid.olsaker@veths.no
Single pass sequencing. Bases called and trimmed with Phred. Vector
pCMV-PCR identified with cross_match. EST name is Clone.g-T7
                                                                                                       Contact: Olsaker, I.

Dept. of Basic Sciences and Aquatic Medicine
Norwegian School of Veterinary Science
P.O. Box 8146 Dep, NO-0033 Oslo, Norway
Tel: +47 22964779
Fax: +47 22964758
                                                                                                                                                                                                                                                                                                                                                                                                                Bos taurus (cattle)
Bos taurus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          499 bp mRNA linear EST 20 KECB31-081.9-T7 NVH bovine early embryo cDNA library KECB taurus cDNA 3', mRNA sequence.
DN847201
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 GACATTATTGTTATAGTTTGTATGGAA 27
                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Ruminantia;
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EST.
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                      primer: T7
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/note="Vector: pAMPI; Site_1: RooRI; Site_2: NotI; First
strand cDNA synthesis was primed using oligo-dT on
magnetic beads with an additional primer
5'-gcggccgctaatacgactcacca-taggg-3'. Second strand
synthesis was a 3-cycle PCR using the primers
5'-ggccgctaatacgactcactatag-3' and
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/mol_type="mRNA"
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RESULT 9
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wmi03-4ms2-c01
DT598349
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                                                                                                                                                                                                                                                                                                                                                                                               Submitted (20-FEB-2004) Sanger Centre, Hinxton, CB10 1SA, UK. http://www.sanger.ac.uk/MICER Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 (bases 1 to 692)
Adams,D.J., Biggs,P.J., Cox,A.V.,
Jonkers,J., Smith,J., Plumb,R.W.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi; Muroidea; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BX977778.1 GI:49709201
GSS; genome survey sequence; MICER.
Mus musculus (house mouse)
Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BX977778 692 bp DNA linear Reverse strand read from insert in 5'HPRT insertion chromosome engineering clone MHPN317a23, genomic sur
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23;
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Direct Submission
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Welwitschia mirabilis
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /Strain="NRF Norwegian Red"
/db_xref="taxon:9913"
/tissue_type="20 [flushed preimplantation embryos"
/tissue_type="20 [flushed preimplantation embryos"
/dev_stage="compact morula - expanded blastcocyst"
/clone lib="NVH bovine early embryo cDNA library KECB"
/note="Vector: pCWV-PCR; The library was constructed using
the Stratagene PCR cDNA Library Construction Kit
(Stratagene Cloning Systems, USA) according to the
suppliers protocol. This includes PCR amplification of
cDNA with adapter-based primers followed by
ligation-independent directional cloning into the vector
                                                                                                                                                                                                                                                                                                                                                                                                                                                            and Bradley, A.
                                                                                                                                                                                                                                                                                                   /mol_type="genomic DNA"
/db_xref="taxon:10090"
/clone="MHPN317a23"
/clone_lib="MHPN"
                                                                                                                                                                                                                                                                                                                                                                 organism="Mus musculus"
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85.2%;
                                                      Wmi03 Welwitschia mirabilis
5', mRNA sequence.
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Pred. No. 2.3e+03;
0; Mismatches 4
                                                                                                                                                                                                                                           Score 20.6; DB 14
Pred. No. 2.3e+03;
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Taylor,R.G.,
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Nishijima, I., Y
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                                                                                    EST 02-SEP-2005
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EST.
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Xenopodinae; Xenopus; Silurana.

1 (bases 1 to 848)

1 (bases 1 to 848)

Richardson,P. Lucas,S., Rokhsar,D., Detter,J.C., N
Brokstein,P. and Lindquist,E.A.

DOE Joint Genome Institute Xenopus tropicalis EST p
Unpublished (2004)

Other_ESTs: JGI_CAAM7770.rev
Contact: Lindquist,E.A., Richardson,P.

DOE Joint Genome Institute

2800 Mitchell Drive, Walnut Creek, CA 94598, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                  848 bp
JGI CAAW7770.fwd NIH XGC tropTe3
IMAGE:7681489 5', mRNA sequence.
CX897969
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Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Gnetophyta; Gnetopsida; Welwitschiales;
Welwitschiaceae; Welwitschia.

1 (bases 1 to 836)
depamphilis.C., Carlson,J., Ma,H., Soltis,D., Soltis,P.,
Oppenheimer,D., Frohlich,M., Doyle,J., Tanksley,S., Webb,M.,
Leebens-Mack,J., McNeal,J., Landherr,L., Ilut,D. and Wall,K.
Generation of ESTs from early flower buds of Welwitschia mirabilis
                                                                                                                                                                                                                                                                         Xenopus tropicalis (western clawed frog)
Xenopus tropicalis
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  State University, University Park, Tel: 814 863 6413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Email: cwd3@psu.edu or jhl10@psu.edu
The sequence provided is trimmed of vector and low quality regions.
Full sequence and original trace file are available from the Plant
Genome Network website (http://pgn.cornell.edu)
Plate: wmi03-4ms2 row: c column: 01
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208 Mueller Laboratory,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note="Vector: pBluescript; Site 1: EcoRI; Site 2: Xho1; This is a directionally cloned, non-normalized library. This library has been generated by the Floral Genome Project (FGP). The Floral Genome Project is funded by NSF's Plant Genome Research Program (DBI-0115694). More information about the project can be obtained at http://fgp.bio.psu.edu"
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lab_host="SOLR"
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Xenopus tropicalis
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PA 16802, USA
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                                                                                                                                                                                                                                                                                       906 bp DNA linear GSS 05-JUL-200 chromosome engineering clone MHPN42e12, genomic survey sequence. CR065011 GI:49798601 GSS; genome survey sequence; MICER. Mus musculus (house mouse)

Mus musculus (house mouse)

Rukarvara
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Plate: CAAM 0081 row: c column: 23
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http://tropicalis.berkeley.edu/home)
cDNA Library Preparation: DOE Joint Genome Institute:
                                                                                                                                                          Adams, D.J., Biggs, P.J., Cox, A.V., Adams, D.J., Biggs, P.J., Plumb, R.W., Jonkers, J., Smith, J., Plumb, R.W., Rogers, J. and Bradley, A.
                                                                                                                                                                                                                                     Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalla; Eutheria; Buarchontoglires; Glires; Rodentia;
Sciurognathi; Muroidea; Muridae; Murinae; Mus.
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DNA Sequencing: DOE Joint Genome Institute: http://www.jgi.doe.gov
Clone Distribution: I.M.A.G.E. Consortium/LLNL:
http://image.llnl.gov
                                                                                                                    Submitted (20-FEB-2004) Sanger Centre, Hinxton,
                                                                                                                                         Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tissue Procurement: Timothy Grammer (Richard M. Harland Laboratory,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Email: cdna@jgi-psf.org
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/mol_type="genomic DNA"
/db_xref="taxon:10090"
                                                                                                UK. http://www.sanger.ac.uk/MICER
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/db_xref="taxon:8364"
/clone="IMAGE:7681489"
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Taylor,R.G.,
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Nishijima,I.,
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nijima,I., Yu,Y.,
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Gasterosteiformes;
Gasterosteidae; Gasterosteus.

1. (bases 1 to 1356)
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Expressed sequence tags from Gasterosteus Unpublished (2003)

Contact: Grimwood, Jane
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CLJ19-B11.xld-t SHGC-CLJ Gasterosteus aculeatus cDNA
CLJ19-B11 3', mRNA sequence.
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DN698710.1 GI:62060219
EST.
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High quality sequence stop: 899.
Cocation/Qualifiers
1. .1356
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Plate: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tel: 650 320 5917
Fax: 650 320 5801
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975 S California Ave, Palo Alto, CA 94304, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Stanford Human Genome Center
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Similarity 85.2%;
23; Conservative
/CIOHE LIDE SANCTURE
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/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /sex="mixed male and female"
/tissue type="whole larva"
/dev stage="21 day old larvae collected at Swarup
/dev stage="21 day old larvae collected at Swarup
/J. Embryol. Exp. Morphol 6: 373-383.1958)"
/lab_host="DH10B (T1 phage resistant)"
/clone_lib="SHGC-CLJ"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Gasterosteus aculeatus"
/mol type="mRNA"
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/clone="CLJ19-B11"
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Pred. No. 2.3e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Submitted (02-AUG-2001) Asao Fujiyama, The Institute of Physical and Chemical Research (RIKEN), Genomic Sciences Center (GSC); 1-7-22 Suehiro-chou, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (E-mail:chimpbes@gec.riken.go.jp, URL:http://hgp.gsc.riken.go.jp/, Tel:81-45-503-9111, Fax:81-45-503-9170) http://hgp.gsc.riken.go.jp/, Tel:81-45-503-9170, http://hgp.gsc.riken.go.jp/, Tel:81-45-503-9170, http://hgp.gsc.riken.go.jp/, Tel:81-45-503-9170, http://hgp.gsc.riken.go.jp/, Tel:81-45-503-9170, http://hgp.gsc.riken.go.jp/, Tel:81-45-503-9170, http://hgp.gsc.riken.go.jp/, Tel:81-45-503-9170, http://hgp.gsc.riken.go.jp/, Tel:81-45-503-9170, http://hgp.gsc.riken.go.jp/, Tel:81-45-503-9170, http://hgp.gsc.riken.go.jp/, Tel:81-45-503-9170, http://hgp.gsc.riken.go.jp/, http://hgp.gsc.rik
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Pan troglodytes DNA, clone: PTB-117P07.F,
AG111813
AG111813.1 GI:16732332
BW053630 713 bp mRNA linear EST 19-OCT-2002 BW053630 Nori Satoh unpublished cDNA library, blood cells Ciona intestinalis cDNA clone cibd079b12 5', mRNA sequence.
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Totoki,Y., Watanabe,H. and Sakaki,Y.
BAC end sequences of Library PTB
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pan troglodytes
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R.Site 1 : SacI
R.Site 2 : SacI.
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http://www.openbiosystems.com/stickleback"
                                                                                                                                                                                                                                                                                                                                                                                                                                                            /cell_type="lymphoblast"
/clone_lib="PTB Chimpanzee Male BAC Library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Pan troglodytes"
/mol_type="genomic DNA"
/db_xref="taxon:9598"
/clone="PTB-117P07.F"
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85.2%;
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Pred. No. 2.7e+03;
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Pred. No. 2.3e+03;
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                                                                                                                                                                                                                                                                                                                    AUTHORS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         351
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BW206337
                                                                                                                                                                                                                                                                                 Ciona intestinalis
Bukaryota; Metazoa; Chordata; Urochordata; Ascidiacea; Enterogona;
Phlebobranchia; Cionidae; Ciona.
1 (bases 1 to 724)
1 (bases 1 to 724)
Satou,Y., Shin-1,T., Kohara,Y. and Satoh,N.
Expressed genes in Ciona intestinalis (2002c)
Unpublished (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4
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1 (bases 1 to 713)
Satou,Y., Satake,M., Azumi,K., Nonaka,M., Shin-i,T., Kohara,Y. and Satoh,N.
                                                                                                                                                                                                  Kyoto University
Sakyo-ku, Kyoto, Kyoto 606-8502,
Tel: 81-75-753-4081
                                                                                                                                                                                                                                                                  Contact: Nori
                                                                                                                                                                                                                                                                                                                                                                                                     Ciona intestinalis
                                                                                                                                                                                                                                                                                                                                                                                                                                      BW206337
BW206337.1 GI:24620951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BW206337 Nori Satoh unpublished cDNA library, cleaving intestinalis cDNA clone cicl093n06 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Email: satch@ascidian.zool.kyoto-u.ac.jp.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tel: 81-75-753-4081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Kyoto University
Sakyo-ku, Kyoto, Kyoto 606-8502,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Contact: Nori Satch
Department of Zoology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Expressed genes in Ciona intestinalis (2002) Unpublished (2002)
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Ciona intestinalis
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                                                                                                                                                                                                                                                  Department of Zoology
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                                                                                                                                                                    satoh@ascidian.zool.kyoto-u.ac.jp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /tissue_type="whole body"
/dev stage="cleaving embryo"
/clone_lib="Nori Satoh unpublished cDNA library, cleaving embryo"
                                                                                 /organism="Ciona intestinalis"
/mol_type="mRNA"
/db_xref="taxon:7719"
                                                                   /clone="cicl093n06"
                                                                                                                                                   ocation/Qualifiers
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                                                                                                                                                                                                                                                                     Satoh
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Pred. No. 2.7e+03;
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Length 724;

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REFERENCE
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BF820181
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Matches
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  90
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Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R.,

Megai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F.,

Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,

Brunstein,A., deoliveira,P.S., Bucher,P., Jongeneel,C.V.,

O'Hare,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
Simpson,A.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Email: asimpson@ludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome
Project. This entry can be seen in the following URL
(http://www.ludwig.org.br/scripts/gethtml2.pl?tl=MR1&t2=MR1-RT0025-
171100-003-e09&t3=2000-11-17&t4=1)
Seq primer: puc 18 forward
Seq primer: puc 18 forward
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Contact: Simpson A.J.G.
Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Shotgun sequencing of the human transcriptome with ORF expressed sequence tags {\bf r}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Buarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
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BF820181
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                                       ACATTATTGTTATAGTTTGTATGGA 26
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      +55-11-2707001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               quality sequence start: 21 quality sequence stop: 94.
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                                                                                                                                                                                /note="Organ: kidney_tumor; Vector: puc18; Site_1: SmaI; Site_2: SmaI; A mini-library was made by cloning products derived from ORESTES PCR (U.S. Letters Patent application No. 196,716 - Ludwig Institute for Cancer Research) profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under low stringency conditions."
                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/dev_stage="Adult"
                                                                                                                                                                                                                                                                                                                                   /clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
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                                                                                                 Score 20.2; DB 2;
Pred. No. 3.2e+03;
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Pred. No. 2.8e+03;
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                                                                                                                     Length 205;
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2 ACATTATTGTTATAGTTTGTATGGA

Query Match

Local

Similarity

88.0%;

Score 20.2; Pred. No. 3.

.2e+03

DB 9;

Length 351; Indels

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Conservative

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Matches

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ORIGIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Email: mmpratteuga.edu

Email: mmpratteuga.edu

Email: mmpratteuga.edu

Email: mmpratteuga.edu

Envert Resources, University of Georgia); plant material prepared

Porest Resources, University of Georgia); plant material prepared

by Craig Zimmermann (School of Forest Resources, University of

Georgia) using rooted cuttings provided by the Forest Biology

Research Cooperative (FERC) and the CCLONES project a the

University of Florida; sequencing done in the Laboratory for

Genomics and Bioinformatics, University of Georgia. Sequence ends

have been trimmed to exclude vector and regions below Phred quality

16. Three-prime sequences are presented as their reverse complement

and have been trimmed to exclude polyA.

Seq primer: M13-21 (TGTAAAACGACGGCCAGT)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Laboratory for Genomics and Bioinformatics
The University of Georgia, Department of Plant Biology
Plant Sciences Building, Rm. 2502, Athens, GA 30602-7271, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unpublished (2005)
Other_ESTs: RTPHOS1 4_F02.g1_A029
Contact: Cordonnier-Pratt MM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pinus taeda
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Coniferopsida; Coniferales; Pinaceae; Pinus; Pinus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RTPHOS1 4 F02.b1 A029 Roots minus phosphorous Pinus taeda cDNA clone RTPHOS1_4_F02_A029 3', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Spermatophyta; Coniferopsida; Coniferales; Pinaceae; Pinus; Pinus; Dases 1 to 351)
Pratt,L., Cordonnier-Pratt,M.M., Lorenz,W.W., Zimmermann,C. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tel: 706 542 1860
Fax: 706 583 0210
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pinus taeda (loblolly pine)
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                   /clone lib="Roots minus phosphorous"
/clone Torgan: Root; Vector: pSL1180, Site 1: EcoRI;
/note="Torgan: Root; Vector: pSL1180, Site 1: EcoRI;
Site 2: XhoI; The library was prepared from polyA+ RNA
from the roots of 1-year-old loblolly pine (Pinus taeda)
cuttings that were rooted and then planted in washed sand.
The rooted cuttings were maintained for 139 days (July 28
2003 harvest) under ambient conditions in a local
2003 harvest) under ambient conditions in a local
greenhouse. They were kept on a weekly regimen of 0.5x
nutrient-complete Hoagland's solution and supplemented
with additional water sufficient to maintain a 15% soil
moisture content. Starting five weeks prior to harvesting
roots for mRNA preparation, the weekly fertilizer regimen
for the potted trees was modified to omit phosphorus from
the 0.5x Hoagland's solution (5 applications). For two
days prior to starting the modified fertilizer regimen,
pots were flushed extensively with water to reduce
residual levels of phosphorus. Double-stranded cDNA was
cloned unidirectionally into pSL1180. Inserts can be
excised with EcoRI (5' end) and XhoI (3' end)."
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/clone="RTPHOS1_4_F02_A029"
lab_host="DH10B-T1_phage-resistant_B._coli"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       organism="Pinus taeda"
/mol_type="mRNA"
/strain="3 CCLONES"
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83

ACATTATTGTTATAGTTTGGCAGGA 107

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REFERENCE
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                                                              RESULT 19
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BQ851812
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1 (bases 1 to 487)

Kozik, A., Michelmore, R.W., Knapp, S., Matvienko, M., Rieseberg, L., Lin, H., van Damme, M., Lavelle, D., Chevalier, P., Ziegle, J., Ellison, P., Kolkman, J., Slabaugh, M.S., Livingston, K., Zhou, Y., Lai, Z., Church, S., Jackson, L. and Bradford, K.

Lettuce and Sunflower ESTs from the Compositae Genome Project http://compgenomics.ucdavis.edu/
Unpublished (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Contact: Alexander Kozik [R.W.Michelmore]
Department of Vegetable Crops, R.W.Michelmore
University of California at Davis (UCD)
Asmundson Hall, UCD, Davis, CA 95616, USA
Tel: 1-(530)-742-1742
Fax: 1-(530)-752-9659
                   Oryzias latipes DNA, survey sequence.
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Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons;
asterids; campanulids; Asterales; Asteraceae; Cichorioideae;
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QGB16F20.yg.ab1 QG_ABCDI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Email: akozik@atgc.org [michelmore@vegmail.ucdavis.edu]
belongs to contig QG_CA_Contig6733, see http://cgpdb.ucdavis.edu/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QGB16F20, mRNA sequence.
BQ851812
                                                                 DE110524
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                                                                                                                                                                                                                                                                                              Similarity
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                                                                                                                                                                                                                                                                      Conservative
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/mol_type="mRNA"
/culTivar="Salinas"
/db_xref="taxon:4236"
/clone="QGB16F20"
/lab_host="E.col1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /clone lib="QG_ABCDI lettuce salinas"
/note="Vector: pBRcDNASfiAB; The library was constructed from 10 different sources of RNA from a single genotype. Separate cDNAs were generated using primers that incorporated unique 5' and 3' tags to distinguish each source of RNA. cDNAs were then pooled, size-fractionated, directionally cloned into a custom medium-copy vector and transformations made with four size classes to minimize size bias. Details of each source of RNA and library directionals.
                                                                                                                                                                                                                                                                                                                                                                                  construction can be obtained at http://cgpdb.ucdavis.edu/TAG_TISSUB=chemical induction
TAG_LIB=QG_ABCDI lettuce salinas
TAG_SEQ=TGTAGCCGGG"
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                                                                                                                                                                                                                                                                                         72.1%;
88.0%;
                                        reverse end
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Pred. No. 3
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                                        of BAC clone: Md0153B05, genomic
                                                                                                                                                                                                                                                                                              .2e+03;
                                                                                                                                                                                                                                                                                                                 DB 3;
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                                                                 linear
                                                                 GSS 02-AUG-2005
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                                                                                                                                                                                                   Rogatcheva, M.B., Meyers, S., He, W., Larkin, D.M., N. Rogatcheva, M.B., Meyers, S., He, W., Larkin, D.M., N. Rogatcheva, M.B. and Schook, L.B. Piggy-BACing the Human Genome: Constructing a Poi Through Comparative Genomics Unpublished (2004)
Unpublished (2004)
Cother GSSs: RPC144_281L13.f
Contact: Lawrence B. Schook
Department of Animal Sciences
University of Illinois at Urbana Champaign
1201 W. Gregory Dr., Urbana, IL 61801, USA
Tel: 217_265_5326
Fax: 217_244_5617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              272
Email: schook@uiuc.edu

Email: schook@uiuc.edu

Clones are derived from the porcine BAC library RPCI-44

Clones are derived from the porcine242.htm). For BAC library

(http://www.bacpac.chori.org/porcine242.htm). For BAC library

availability, please contact Pieter de Jong (pdejong@chori.org).

Clones may be purchased from BACPAC Resources

(http://BACPACorders.chori.org). This work was undertaken as part

of the International Swine Genome Sequencing Consortium by

of the International Swine Genome Sequencing Consortium by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CL387597 583 bp DNA linear GSS 19-AUG-
RPCI44 281L13.r RPCI-44 Sus scrofa genomic clone RPCI44_281L13, genomic survey sequence.
CL387597 CL387597.1 GI:51439557
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Neoteleostei;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Atherinomorpha;
Beloniformes; Adrianichthyldae; Oryziinae; Oryzias.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Submitted (30-JUN-2005) Nobuyoshi Shimizu, Keio University, Sof Medicine, Molecular Biology; 35 Shinanomachi, Shinjuku-ku, Tokyo, 160-8582, Japan (E-mail:nshimizu@dmb.med.keio.ac.jp, Tel:81-3-3351-2370, Fax:81-3-3351-2370)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sus scrofa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sus
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2 (bases 1 to 543)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Suina; Suidae;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /clone lib="Medaka HdrR BAC library" /note="This sequence is reverse end of BAC clone Md0153B05."
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/mol_type="genomic DNA"
/db_xref="taxon:8090"
/clone="Md0153B05"
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517
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Brassica napus Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Eukaryota; Magnoliophyta; eudicotyledons; core eudicotyledons; spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons; rosids; eurosids; l; Brassicales; Brassicaceae; Brassica.
                              N
                                                                                                                                                                                                                                                                                                                                     Tel: 33 1 69 47 54 00 Fax: 33 1 69 47 54 10
                                                                                                                                                                                                                                                                                                                                                                                                                    Genoplante, a major partnership french program in plant genomics Unpublished (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BN20.051E05F011220
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Class: BAC ends.
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Plate: 281 row: L
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                                                                                                                                                                                                                                                                                                                                                                         93, rue Henri Rochefort 91025 EVRY CEDEX France
                                                                                                                                                                                                                                                                                                                                                                                                          Contact:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Genoplante.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Brassica napus (rape)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CD820121.1 GI:32502061
                                                                             Similarity
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                  ACATTATTGTTATAGTTTGTATGGA 26
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (bases 1 to 621)
                                                                                                                                                                                                                                                                       s sequence has been generated in the framework of the french nt genomics programme 'Genoplante' (http://www.genoplante.com http://genoplante.info.infobiogen.fr).
Location/Qualifiers
                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                        /mol_type="mRNA"
/cultivar="Jet Neuf"
/db_xref="taxon:3708"
/clone="BN20051E05"
/tissue_type="seed"
/clone_Tib="BN20"
                                                                                                                                                                                                                                                                                                                                                                                                    Genoplante
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /cell_type="blood"
/clone_lib="RPCI-44"
/note="Vector: pTARBAC2; Site_1: EcoRI; Site_2: EcoRI;
/note="Vector: pTARBAC2; Site_1: EcoRI; Site_2: EcoRI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                          organism="Brassica napus"
                                                                                                                                                                                                                                                           . .621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mol_type="genomic DNA"
/strain="four pigs (breed: 37.5% Yorks Landrace and 25%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             organism="Sus scrofa"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              . .583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              clone="RPCI44_281L13"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               xref="taxon:9823"
                                                                           72.1%;
88.0%;
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88.0%;
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                                                            0
                                                            Score 20.2; DB 5;
Pred. No. 3.3e+03;
0; Mismatches 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 20.2; DB 1:
Pred. No. 3.3e+03;
0; Mismatches
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 541
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                                                                                           Length 621;
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                                                                          RESULT 23
BQ864783
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102 GACATTCTTGTTATGGTTTGGATGG
BQ864783
BQ864783.1
                                  BQ864783
QGC27K11.yg.abl QG ABCDI
QGC27K11, mRNA sequence.
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GGB23K09.yg.abl QG ABCDI
QGB23K09, mRNA sequence.
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Unpublished (2002)
Contact: Alexander Kozik [R.W.Michelmore]
Department of Vegetable Crops, R.W.Michelmore
University of California at Davis (UCD)
Asmundson Hall, UCD, Davis, CA 95616, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cichorieae; Lactuca.

(Dases 1 to 645)

(Dases 1 to 645)

Kozik, A., Michalmore, R.W., Knapp, S., Matvienko, M., Rieseberg, L., Lin, H., van Damme, M., Lavelle, D., Chevaller, P., Ziegle, J., Lin, H., van Damme, M., Slabaugh, M.S., Livingston, K., Zhou, Y., Elison, P., Kolkman, J., Slabaugh, M.S., Livingston, K., Zhou, Y., Lai, Z., Church, S., Jackson, L. and Bradford, K.

Lettuce and Sunflower ESTs from the Compositae Genome Project
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Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Email: akozik@atgc.org [michelmore@vegmail.ucdavis.edu]
belongs to contig QG_CA_Contig6733, see http://cgpdb.ucdavis.edu/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tel: 1-(530)-742-1742
Fax: 1-(530)-752-9659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Lactuca sativa
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                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                         GACATTATTGTTATAGTTTGTATGG
                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                        /clone lib="QG_ABCDI lettuce salinas"
/clone lib="QG_ABCDI lettuce salinas"
/note="Vector: pBRcDNASfiAB; The library was constructed from 10 different sources of RNA from a single genotype. Separate cDNAs were generated using primers that incorporated unique 5' and 3' tags to distinguish each source of RNA. cDNAs were then pooled, size-fractionated, directionally cloned into a custom medium-copy vector and transformations made with four size classes to minimize size bias. Details of each source of RNA and library construction can be obtained at http://cgpdb.ucdavis.edu/TAG_TISSUBschemical induction
TAG_TIB=QG_ABCDI lettuce salinas
TAG_SEQ=TGTAGCCCGGG"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mol_type="mRNA"
/cultivar="Salinas"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   organism="Lactuca sativa"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  'lab_host="E.coli"
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88.0%;
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Pred. No. 3.3e
0; Mismatches
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RESULT 24
BQ853474
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AUTHORS
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VERSION
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                         REFERENCE
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Best Local
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Unpublished (2002)
Contact: Alexander Kozik [R.W.Michelmore]
Department of Vegetable Crops, R.W.Michelmore
University of California at Davis (UCD)
Asmundson Hall, UCD, Davis, CA 95616, USA
Tel: 1-(530)-742-1742
Fax: 1-(530)-752-9659
                                                                Lactuce sativa
Lactuce striva
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons;
ssterids; campanulids; Asterales; Asteraceae; Cichorioideae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 GACATTATTGTTATAGTTTGTATGG 25
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Kozik, A., Michelmore, R.W., Knapp, S., Matvienko, M., Rieseberg, L., Lin, H., van Damme, M., Lavelle, D., Chevaller, P., Ziegle, J., Ellison, P., Kolkman, J., Slabaugh, M.S., Livingston, K., Zhou, Y., Lai, Z., Church, S., Jackson, L. and Bradford, K.
Lettuce and Sunflower ESTs from the Compositae Genome Project
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Lactuca sativa
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons;
core eudicotyledons;
asterids; campanulids; Asterales; Asteraceae; Cichorioideae;
                       Cichorieae; Lactuca.
1 (bases 1 to 706)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Email: akozik@atgc.org [michelmore@vegmail.ucdavis.edu] belongs to contig QG_CA_Contig6733, see http://cgpdb.uc
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Kozik, A., Michelmore, R.W.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Separate cDNAs were generated using primers that incorporated unique 5' and 3' tags to distinguish each source of RNA. cDNAs were then pooled, size-fractionated, directionally cloned into a custom medium-copy vector and transformations made with four size classes to minimize size bias. Details of each source of RNA and library construction can be obtained at http://cgpdb.ucdavis.edu/TAG_TISSUE=chemical induction
TAG_TIB=QG_ABCDI lettuce salinas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /lab host="B.coli"
/clome_lib="QG_ABCDI lettuce salinas"
/clome_tib="QG_ABCDI lettuce salinas"
/note="Vector: pBRCDNASfilB; The library was constructed
from 10 different sources of RNA from a single genotype.
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/clone="QGC27K11"
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/cultivar="Salinas"
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Pred. No. 3.3e+03;
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lettuce
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Knapp,S., Matvienko,M., Rieseberg,L.,
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Liva cDNA clone
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ACCESSION
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Best Local S
Matches 22
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                                                                                                                                                                                                                             AUTHORS
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                                                                        Cichorieae; Lactuca.

1 (bases 1 to 728)

Kozik, A., Michelmore, R.W., Knapp, S., Matvienko, M., Rieseberg, L., Lin, H., van Damme, M., Lavelle, D., Chevaller, P., Ziegle, J., Ellison, P., Kolkman, J., Slabaugh, M.S., Livingston, K., Zhou, Y., Lai, Z., Church, S., Jackson, L. and Bradford, K.

Lettuce and Sunflower ESTS from the Compositae Genome Project http://compgenomics.ucdavis.edu/
Unpublished (2002)
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Contact: Alexander Kozik [R.W.Michelmore]
Copartment of Vegetable Crops, R.W.Michelmore
University of California at Davis (UCD)
Asmundson Hall, UCD, Davis, CA 95616, USA
Contact: Alexander Kozik [R.W.Michelmore]
Department of Vegetable Crops, R.W.Michelmore
University of California at Davis (UCD)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22;
                                                                                                                                                                                                                                                                                          Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons; asterids; campanulids; Asterales; Asteraceae; Cichorioideae;
                                                                                                                                                                                                                                                                                                                                                                          Lactuca serriola
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     BU007386.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QGH2a10.yg.ab1 QG_EFGHJ lettuce serriola Lactuca serriola cDNA clone QGH2a10, mRNA sequence.
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Fax: 1-(530)-752-9659
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Ellison,P., Kolkman,J., Slabaugh,M.S., Livingston,K., Zhou,Y.,
Ellison,P., Kolkman,J., Slabaugh,M.S., Livingston,K., Zhou,Y.,
Lai,Z., Church,S., Jackson,L. and Bradford,K.
                                                                                                                                                                                                                                                                                                                                                                                               Lactuca serriola
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Email: akozik@atgc.org [michelmore@vegmail.ucdavis.edu]
belongs to contig QG_CA_Contig6733, see http://cgpdb.uc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACATTCTTGTTATGGTTTGGATGG 126
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TAG_LIB-QG_ABCDI lettuce salinas
TAG_SEQ-TGTAGCCCGGG"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /lab host="B.coli"
/clome_lbb="QG_ABCDI lettuce salinas"
/note="Vector: pBrcDNASfiAB; The library was constructed
from 10 different sources of RNA from a single genotype.
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Pred. No. 3.3e+03;
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SOURCE
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
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source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           644 GACATTCTTGTTATGGTTTGGATGG 668
                    Email: jbedell@oriongenomics.com
plate: fsbb001f047 row: i colun
Seq primer: k Reverse
Class: methylation filtered
High quality sequence stop: 758.
                                                                                                                                                                                                                                                                                                                                                             Bedell, J.A., Budiman, M.A., Nunberg, A., Citek, R.W., Robbins, D., Jones, J., Filck, E., Rohlfing, T., Fries, J., Bradford, K., McMenamy, J., Smith, M., Holeman, H., Roe, B.A, Wiley, G., Korf, I.F. Rabinowicz, P.D., Lakey, N., McCombie, W.R., Jeddeloh, J.A. and Martienssen, R.A.
                                                                                                                                                                                                               Contact: Bedell JA
Orion Genomics, LLC
4041 Forest Park Ave,
                                                                                                                                                                                                                                                                                                             Sorghum genome sequencing by methylation filtration PLOS Biol. 3 (1), e13 (2005)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnollophyta; Liliopsida; Poales; Poaceae; PACCAD clade; Panicoideae; Andropogoneae; Sorghum.

1 (bases 1 to 758)
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Sorghum bicolor
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758 bp DNA linear GSS 01-NOV-2004 fsbb001f047illk0 Sorghum methylation filtered library (LibID: 104) Sorghum blcolor genomic clone fsbb001f047ill, genomic survey
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Plate: QGH2 row:
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belongs to contig QG_CA_Contig6733, see http://cgpdb.ucdavis.edu/
                                                                                                                                                                 Tel: 314 615 6979
Fax: 314 615 5975
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/(lone lib="QG EFGHJ lettuce serriola"
/(clone lib="QG EFGHJ lettuce serriola"
/(clone lib="QG EFGHJ lettuce serriola"
/(clone lib="Vector: pBRcDNASfiAB; The library was constructed from 10 different sources of RNA from a single genotype.
Separate cDNAs were generated using primers that incorporated unique 5' and 3' tags to distinguish each source of RNA. cDNAs were then pooled, size-fractionated, directionally cloned into a custom medium-copy vector and transformations made with four size classes to minimize size bias. Details of each source of RNA and library construction can be obtained at http://cgpdb.ucdavis.edu/TAG_IISUE=leaves dark grow
TAG_ISD=QE EFGHJ lettuce serriola
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             organism="Lactuca serriola"
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88.0%;
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Pred. No. 3.3e+03;
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                                                                                                                                                                                                                                                                     CE 2 (bases 1 to 760)

CE 3 (bases 1 to 760)

RS Hattori,M., Toyoda,A., Noguchi,H., Kojima,T. and Sakaki,Y.

Direct Submission

AL Submitted (17-NOV-2003) Masahira Hattori, The Institute of Physical and Chemical Research (RIKEN), Genomic Sciences Center (GSC);

and Chemical Research (RIKEN), Genomic Sciences Center (GSC);

1-7-22 Suehiro-chou,Tsurumi-ku, Yokohama, Kanagawa, 230-0045, Japan (E-mail:hattori@gsc.riken.jp, URL:http://hgp.gsc.riken.go.jp/,

Tel:81-45-503-9111, Fax:81-45-503-9170)

Clones are derived from the mouse BAC library MSMg01. For BAC library availability, please contact Kuniya Abe (abe@rtc.riken.jp).

Tsukuba Institude, Bio Resource Center,

The Institute of Physical and Chemical Research (RIKEN) 3-1-1

KOyadai, Tsukuba, 305-0744 Japan

phone: 81-298-36-9189, fax: 81-298-36-9199

e-mail: abe@rtc.riken.jp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       173 ACAATGTTGTATATTTTGTATGGA 197
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22; Conserv
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Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
Sciurognathi; Muroidea; Muridae; Murinae; Mus.
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Mus musculus
                                                                                                                                                                                      Vector
                                                                                                                                                                                                         Sequencing :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Abe, K., Noguchi, H.,
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/organism="Mus musculus molossinus"
/mol type="genomic DNA"
/sub_species="molossinus"
/db_xref="taxon:57486"
                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="genomic DNA"
/cultivar="ATx623"
/db_xref="taxon:4558"
/clone="fsbb001f047il1"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Saitou, N., Hattori, M.,
                                                                                                                                      : PBACe3.6
: ECORI
: ECORI.
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88.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               <u>,</u>
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Pred. No. 3.3e+03;
0; Mismatches 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Library constructed by Bruce Blumberg
Library normalized by Jihwan Song
DNA Sequencing by: Washington University Genome Sequencing by: Washington University Genome Sequencing Source lab clone id - xlnnga009c18 This clone is available royalty-free through LLML; contact the IMAGE Consortium (image@image.llnl.gov) for further information.

Seq primer: -40Up from Gibco
High quality sequence stop: 476.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Contact: Sandy Clifton, Ph.D.
WashU Xenopus EST project, 1999
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Clifton, S., Johnson, S.L., Blumberg, B., Song, J., Hillier, L., Pape, D., Martin, J., Wylie, T., Underwood, K., Theising, B., Bowers, Y., Person, B., Gibbons, M., Harvey, N., Ritter, E., Jackson, Y., McCann, R., Waterston, R. and Wilson, R.
Waterston, R. and Wilson, R.
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Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Xenopus laevis
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: est@watson.wustl.edu
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314 286 1810
              /clone lib="Xenopus laevis gastrula non normalized"
/note="Vector: pBluescript SK-; Site 1: EcoRI; Site 2:
XhoI; cDNA was prepared from 2 ug of poly A+ RNA (equal parts from stage 10.5 and stage 11.5 gastrulae).
EcoRI-XhoI cut cDNA was then ligated into UniZap-XR (Stratagene) with EcoRI at the 5' end and XhoI at the 3' end. The library was mass excised and used to infect Top10F'. Clones were picked into freezing medium (per liter 15 g tryptone, 10g yeast extract, 5g NaCl, 36 mM (X2HPO4, 13.2 mM KH2PO4, 17.7 mM Na-citrate, 0.4 mM MgSO4 7 H2O, 6.8 mM (NH4)2SO4, 4 % w/v glycerol) and grown for 24 hours. Original library construction by Bruce Blumberg (Cho et al 1991 Cell 67, 1111-1120)."
                                                                                                                                                                                                                                                                                                                                                                            /organism="Xenopus laevis"
/mol_type="mXNA"
/mol_type="mXNA"
/db_xref="taxon:8355"
/clone="IMAGE:3750473"
/clone="IMAGE:3750473"
/tissue_type="gastrula (stages 10.5, 11.5 mixed)"
/lab_host="Top-10 F'"
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/clone_Tib="MSMg01 Mouse Male BAC Library"
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/sex="male"
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Pred. No. 3.3e+03;
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HS_4828_B1_F06_T7A CIT Approved Human Genomic Sperm Library D
sapiens genomic clone Plate=4828 Col=11 Row=L, genomic survey
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                                            BM610169 627 bp n
17000687110115 A.Gam.ad.cDNA.blood1
19600449718565 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Seq primer: T7
Class: BAC ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Email: jwallace@u.washington.edu
Clones may be purchased from Research Genetics (info@resgen.com)
BAC end Web Server: http://www.htsc.washington.edu
Plate: 4828 row: L column: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  High Throughput Sequencing Center
University of Washington
401 Queen Anne Avenue North, Seattle,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contact: Mahairas GG, Wallace JC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence-tagged connectors: A sequence approach to mapping and scanning the human genome
Proc. Natl. Acad. Sci. U.S.A. 96 (17), 9739-9744 (1999)
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1 (bases 1 to 534)

1 (bases 1 to 534)

Mahairas,G.G., Wallace,J.C., Smith,K., Swartzell,S., Keller,A., Shaker,R., Furlong,J., Young,J., Zhao,S.,
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tel: (206) 616-3618
Fax: (206) 616-3887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10449764
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/note="Organ: sperm; Vector: pBeloBAC11; BAC Clones in
E-Coli DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .534
                                                                                                                                                                                                                                                                                                                                                                                                 /db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                 organism="Homo sapiens"
/mol_type="genomic DNA"
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Anopheles gambiae cDNA clone
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Rukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;

Neoptera; Rndopterygota; Diptera; Nematocera; Culicoidea;

Culicidae; Anophelinae; Anopheles.

1 (bases 1 to 62?)

Holt, R.A., Lin, J.-J., Murphy, S.D., Evans, C.A., Kraft, C.L.,
Charlab, R., Collins, F.H., Venter, J.C. and Hoffman, S.L.

Celera Anopheles gambiae EST project
Unpublished (2002)

Contact: Holt R.A.
                                                                                                                                                                                                                                                                     Oryza coarctata
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; BEP
clade; Ehrhartoideae; Oryzeae; Oryza.
                                                                                                                                                                                                                                                                                                                                                                                                                                                CZ821000 664
OC_Ba0199G04.f OC_Ba Oryza
5', genomic survey sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 GACATTATTGTTATAGTTTGTATGGAAC 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Celera Genomics
45 w. Gude Dr., Rockville,
Tel: 2404533151
                        University of Arizona
Forbes Building Room 303,
Tel: 520 626 9595
Fax: 520 621 1259
                                                                                                                            OMAP (Oryza Map Alignment Project) - Arizona Genomics Institute Unpublished (2005)
Contact: Rod A. Wing
                                                                                                                                                                                                                                                                                                                                                               Oryza coarctata (Porteresia coarctata)
                                                                                                                                                                                                                                                                                                                                                                                                                          5', genomic survey sequence.
CZ821000
  Email: rwing@genome.arizona.edu
                                                                                                                                                                                                             Rao, K., Luo, M., Jetty, R.,
                                                                                                                                                                                                                              Kim, H.,
                                                                                                                                                                                                                                                                                                                                                                                                        CZ821000.1 GI:71260853
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Anopheles gambiae (African malaria mosquito)
                                                                                                          Arizona Genomics Institute
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                                                                                                                                                                                                        Collura, K., Wissotski, M., Byrne, M., Stum, D., Smart, D., Luo, M., Jetty, R., Kudrna, D., Muller, C., Soderlund, C. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /Clone lib="A.Gam.ad.cDNA.blood1"
/note="Vector: pSport1; Site 1: Sall; Site 2: Not1; Whole /note="Vector: pSport1; Site 1: Sall; Site 2: Not1; Whole /note="Vector: pSport1; Site 1: Sall; Site 2: Not1; Whole /notes after human blood feeding. cDNA inserts >500 bp cloned directionally into pSport 1. Not 1 site is 3'. Clones available through the Malaria Research and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Reference Reagent Resource Center (www.malaria.mr4.org)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Anopheles gambiae"
/mol_type="mRNA"
/strain="RSP-ST (Reduced susc. to Permethrin - std.
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lab_host="DH10b"
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AL849178
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AL849178
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Seq primer: TAA TAC GAC TCA CTA TAG
Class: BAC ends.
                                                                                                                                                                                                                                                                        constructed by Aaron M. Zorn.
CDNA was oligo dT primed from Sug of poly A+ RNA from EcoRI-NotI cut cDNA was then ligated into pCS107 with 5' end and NotI at the 3' end.
Vector: pCS107; Site 1: EcoRI; Site 2: NotI Host: Escherichia coli X11-blue.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unpublished (2003)
On Sep 15, 2002 this sequence version replaced Contact: Taylor R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Xenopodinae; Xenopus; Silurana.

1 (Dases 1 to 665)
Croning, M.D.R., Ashurst, J.L., Taylor, R., Zorn, A.M. and Rogers, J. Sanger Xenopus tropicalis EST project 2001 (11_2003)
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EST.
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                                                                                                                                                                                                                                                                                                                                                                                                                                         Hinston, Cambridgeshire, CB10 1SA, UK
Email: trop@sanger.ac.uk
Sanger Xenopus troppicalis EST project 2001
TROPICALIS_SEQUENCE ID: TEgg002h04.plkSP6
                                                                                                                                                                                                                                                                                                                                                                                                  This sequence is from a Xenopus Gene Collection (XGC) library
                                                                                                                                                                                                                                                                                                                                                                                                                            Sequencing primer:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sanger Institute
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Xenopus tropicalis
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BACKWARD: CAC TCA TTA GGC ACC CCA
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/clone_lib="XGC-egg"
/note="Vector: pCS107; Site_1: EcoRI; Site_2: NotI; cDNA
/note="Vector: pCS107; Site_1: EcoRI, Site_2: NotI; cDNA
was oligo dT primed from 5ug of poly A+ RNA from egg.
EcoRI-NotI cut cDNA was then ligated into pCS107 with
EcoRI at the 5' end and NotI at the 3' end"
                                                                                                                                                                   /organism="Xenopus tropicalis"
/mol_type="mRNA"
/db_xref="taxon:8364"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mol_type="genomic_DNA
/db_xref="taxon:77588"
/clone="OC_Ba0199G04"
                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /dev_stage="mature"
/lab_host="PH10B"
/lab_host="PH10B"
/clone lib="CC_Ba"
/note="Vector: <u>P</u>AGIBAC1; Site_1: HindIII; Site_2: HindIII"
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                                                                                                      dev_stage="egg"
|lab_host="Escherichia coli XL1-blue"
                                                                                                                                             clone="TEgg002h04"
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s cDNA clone
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TEGG002h04 5', mRNA
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CX689149/c
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                                                                                                                                                                                                                                                                           Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unpublished (2004)
Contact: Dr. James A. Coffman
WashU Sea urchin EST Project
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            700 bp ydc08b02.y2 Sea urchin EST Libl S clone ydc08b02 5', mRNA sequence. CX689149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Coffman, J.A., Robertson, A.J., Clifton, S., Pape, D., Hillier, L., Martin, J., Wylie, T., Dante, M., Meyer, R., Theising, B., Bowers, Y., Gibbons, M., Ronko, I., Tsagareishvili, R., Ritter, E., Kennedy, S. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Strongylocentrotus purpuratus
Eukaryota; Metazoa; Echinodermata; Eleutherozoa;
Echinoidea; Euechinoidea; Echinacea; Echinoida;
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                                                         CX908094 749 bp mRNA
JGI CAAN728.fwd NIH XGC_tropTe4 Xenopus
IMAGE:7686784 5', mRNA sequence.
CYAGROGO
                                                                                                                                                                                                                                                           23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA sequencing by: Washington University Genome Sequencing Center Seq primer: -28RPpOT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WashU Sea Urchin EST Project
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                                  CX908094.1 GI:58647438
                                                  CX908094
                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Email: est@watson.wustl.edu
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Xenopus tropicalis (western clawed frog)
                                                                                                                                                                                                               GACATTATTGTTATAGTTTGTATGGAAC 28
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                                                                                                                                                                                        GACAGTATTGGTTCAGTTTGTATGAAAC 506
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     quality sequence stop: 700
Location/Qualifiers
                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                          /clone lib="Sea urchin BST Lib1"
/note="Vector: pCMVSport6.1 (Invitrogen); Site 1: Not1;
Site 2: Smal; Arrayed normalized library of full-length
cDNAS representing blastula stage transcriptome of the i
urchin Strongylocentrocus purpuratus, cloned into the
vector pCMVSport6.1 (Invitrogen)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Strongylocentrotus purpuratus"
|mol_type="muRNA"
|db_xref="teaxon:7668"
|clone="ydc08b02"
                                                                                                                                                                                                                                                                                                                                                                                                                                                   lab_host="DH10B"
                                                                                                                                                                                                                                                                         71.4%;
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Pred. No. 3.9e+03;
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Pred. No. 3.9e+03
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(CE 1 (bases 1 to 749)

RS Richardson, P., Lucas, S., Rokhsar, D., Detter, J.C., Ng, D.C., Brokstein, P. and Lindquist, E.A.

DOB Joint Genome Institute Xenopus tropicalis EST project Unpublished (2004)

Other ESTs: JGI CAAN728.rev
Contact: Lindquist, B.A., Richardson, P.

DOB Joint Genome Institute
2800 Mitchell Drive, Walnut Creek, CA 94598, USA

Tel: 925 296 5600

Fax: 925 296 5710
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                 242
CZ754866

OC_Ba0106B12.f OC_Ba Oryza coarctata genomic clone OC_Ba0106B12
5', genomic survey sequence.
CZ754866.1 GI:71194717
GSS.
Oryza coarctata (Porteresia coarctata)
Oryza coarctata (Porteresia coarctata)
CX754866.1 GI:71194717
CSS.
Oryza coarctata (Porteresia coarctata)
Oryza coarctata (Porteresia coarctata)
CX754866.1 GI:71194717
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Oryza coarctata (Porteresia coarctata)
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Oryza coarctata (Porteresia coarctata)
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Oryza coarctata (Porteresia coarctata)
CX754866 GI:71194717
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Oryza coarctata (Porteresia Coarctata)
CX754866 GI:71194717
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            University of California, Berkeley:
http://tropicalis.berkeley.edu/home)
cDNA Library Preparation: DOB Joint Genome Institute:
http://www.jgi.doe.gov
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Tissue Procurement: Timothy Grammer (Richard M. Harland Laboratory,
                                                                                                                                                                                                                                                                                                                                 GAAATTATTGCTATAAATAGTATGGAAC 269
                                                                                                                                                                                                                                                                                                                                                                          GACATTATTGTTATAGTTTGTATGGAAC 28
                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    organism="Xenopus tropicalis"
/mol_type="mRNA"
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82.1%;
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Pred. No. 3.9e+03;
Pred. No. 3.9e+03;
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REFERENCE
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DV932465
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                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae; Bovinae; Bos.

E 1 (bases 1 to 763)

Moore, S., Alexander, L., Brownstein, M., Guan, L., Lobo, S., Meng, Y., Transguchi, M., Wang, Z., Yu, J., Prange, C., Schreiber, K., Shenmen, C., Wagner, L., Bala, M., Barbazuk, S., Barber, S., Babakaiff, R., Wagner, L., Chun, E., Del Rio, L., Gibson, S., Hanson, R., Stott, J., Kirkpatrick, R., Liu, J., Mateuo, C., Mayo, M., Santos, R.R., Stott, J., Tsai, M., Wong, D., Siddiqui, A., Holt, R., Jones, S.J. and Marra, M.A. Bovine Genome Sequencing Program: Full-length cDNA Sequencing Contact: Robert Kirkpatrick
Contact: Robert Kirkpatrick
Canada's Michael Smith Genome Sciences Centre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OMAP (Oryza Map Alignment Project) - Arizona Genomics Institute Unpublished (2005)
Contact: Rod A. Wing Arizona Genomics Institute University of Arizona Forbes Building Room 303, Tucson, AZ 85721-0036, USA Tel: 520 621 1259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GACATTATIGTTATAGTTTGTATGGAAC 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23;
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                                                     Suite 100, 570 West 7th A
Canada, V5Z 486
Tel: 1-604-707-5900 x5406
                                                                                           BC Cancer Agency
Suite 100, 570 West 7th Avenue,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LB03025.CR_O19 GC_BGC-30
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BACKWARD: CAC TCA TTA GGC ACC CCA
Plate: 0106 row: B column: 12
Seg primer: TAA TAC GAC TCA CTA TAG
Class: BAC ends.
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                                         Fax: 1-604-876-3561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Email: rwing@genome.arizona.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
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(bases 1 to 754)

m,H., Collura,K., Wissotski,M., Byrne,M., Stum,D., Smart,D.,

m,H., Collura,K., Wissotski,M., Byrne,M., Stum,D., Smart,D.,

m,H., Collura,K., Wissotski,M., Byrne,M., Stum,D., Smart,D.,
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robertk@bcgsc.ca
Length: 763 Std Error: 0.00
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/lab_host="DH10B"
/lab_host="DC_Ba"
/clone_lib="OC_Ba"
/note="Vector: pAGIBAC1; Site_1: HindIII; Site_2: HindIII"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="genomic DNA"
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/clone="OC_Ba0106B12"
/tissue_type="leaves"
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82.1%;
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. 3.9e+03;
                                                                                             Vancouver,
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High quality sequence stop: 724.
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JGI CAAM6990.fwd NIH XGC_tropTe3
IMAGE:7680909 5', mRNA sequence.
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                                     /organism="Xenopus tropicalis"
/mol_type="mRNA"
/db_xref="taxon:8364"
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/clone="IMAGE:8141805"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /mol_type="mRNA"
/strain="L1 Hereford"
                     clone="IMAGE: 7680909"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sex="female"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          organism="Bos taurus"
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Richardson, P., Lucas, S., Rokhsar, D., Detter, J.C., Ng, D.C. Brokstein, P. and Lindquist, E.A. Brokstein, P. and Lindquist, E.A. DOE Joint Genome Institute Xenopus tropicalis EST project Unpublished (2004)
Other_ESTs: JGI_CAAM6990.rev
                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Lindquist,E.A., Richardson,P.
DOE Joint Genome Institute
2800 Mitchell Drive, Walnut Creek, CA 94598,
Tel: 925 296 5600
Fax: 925 296 5710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Xenopus tropicalis
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
Xenopodinae; Xenopus; Silurana.
Naming Conventions: BST name is generated by the concatenation of the JGI Clone Id and the direction of sequencing. The suffix '.fwd' indicates a forward sequencing read of the insert. It does not necessarily reflect the orientation of the insert.
                                                                                                                                                                                                                                               University of California, Berkeley:
http://tropicalis.berkeley.edu/home)
cDNA Library Preparation: DOE Joint Genome Institute:
                                                                                                                      http://www.jgi.doe.gov
DNA Sequencing: DOE Joint Genome Institute: http://www.
Clone Distribution: I.M.A.G.E. Consortium/LLNL:
http://image.llnl.gov
                                                                                                                                                                                                                                                                                                                               Email: cdna@jgi-psf.org
Tissue Procurement: Timothy Grammer (Richard M. Harland Laboratory,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note="Vector: pExpress 1; Site_1: Blunt (5' Site_2: NotI (3' end of cDNA)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /tissue_type="Muscle"
/dev stage="6 months old fetus"
/dev stage="6. coli DH10B T1 Phage
/lab_host="E. coli DH10B T1 Phage
/clone lib="GC BGC-30"
/note="Vector: pExpress 1; %ite_1:
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Xenopus tropicalis
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CDNA clone
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CG920252
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VERSION
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                                                    Query Match
Best Local S
Matches 23
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8
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                                                                                                                                                                                                                                                                                                                                                                                    1 (bases 1 to 954)
Town, C.D., Shetty, J., Koo, H. and Feldblyum, T.F.
Sequencing of BAC ends from Medicago truncatula
Unpublished (2003)
Other_GSSs: MBENQ64TF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons; rosids; eurosids I; Fabales; Fabaceae; Papilionoideae; Trifolieae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       μ
                                                                                                                                                                                                                                                                    Email: cdtown@tigr.org
Seq primer: CAGGAAACAGCTATGACC
Class: BAC ends.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Medicago truncatula (barrel medic)
Medicago truncatula
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MBENQ64TR mth2 Medicago truncatula
                                                                                                                                                                                                                                                                                                                                        9712 Medical Center Drive, Rockville,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CG920252.1 GI:39779935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       survey sequence.
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                                                                 Similarity
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                       GACATTATTGTTATAGTTTGTATGGAAC 28
GAAAGTATTTTAATAGTTTGTATTGAAC 95
                                                  71.4%;
nilarity 82.1%;
Conservative
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/note="Vector: pBeloBAC11; Site_1: HindIII; Site_2:
HindIII; Cook, D.R. and Kim, D.J, unpublished"
                                                                                                                                                                                             /organism="Medicago truncatula"
/mol_type="genomic DNA"
/cultivar="genotype A17"
                                                                                                                                                                  /db_xref="taxon:3880"
/clone="10K7"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               tissue_type="Testes"
                                                                                                                                                                                                                                                        ocation/Qualifiers
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82.1%;
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0; Mismatches
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Pred. No. 3.9e+03;
0; Mismatches
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                                                                DB 12;
3.9e+03;
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COMMENT

TITLE

RESULT 39

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ORIGIN

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REFERENCE
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VERSION
KEYWORDS
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BZ392066
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TITLE
JOURNAL
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Best Local
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                 Wang, Z., Samuelson, J., Clark, C.G., Eichinger, D., Dellen, K., Hall, N., Anderson, I. and Loftus, B. Gene discovery in the Entamoeba invadens genome Mol. Biochem. Parasitol. 129 (1), 23-31 (2003)
                                                                                               Eukaryota; Entamoebidae; Entamoeba.

1 (bases 1 to 536)
                                                                                                                                                                                                                                                   genomic survey sequence.
                                                                                                                                                                                                                                                                       EINCK17TF EI_10_12_KB Entamoeba
                                                                                                                                                                                                                                                                                               BZ392066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Alexander Kozik [R.W.Michelmore]
Department of Vegetable Crops, R.W.Michelmore
University of California at Davis (UCD)
Asmundson Hall, UCD, Davis, CA 95616, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             http://compgenomics.ucdavis.edu,
Unpublished (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kozik, A., Michelmore, R.W., Knapp, S., Matvienko, M., Rieseberg, L., Lin, H., van Damme, M., Lavelle, D., Chevaller, P., Ziegle, J., Elison, P., Kolkman, J., Slabaugh, M.S., Livingston, K., Zhou, Y., Lai, Z., Church, S., Jackson, L. and Bradford, K. Lettuce and Sunflower 257s from the Compositae Genome Project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons; asterids; campanulids; Asterales; Asteraceae; Asteroideae; Helianthus.
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                                                                                                                                             Entamoeba invadens
                                                                                                                                                                 Entamoeba invadens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Email: akozik@atgc.org [michelmore@vegmail.ucdavis.edu]
belongs to contig QH_CA_Contig4705, see http://cgpdb.ucdavis.edu/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tel: 1-(530)-742-1742
Fax: 1-(530)-752-9659
                                                                                                                                                                                                                                                                                                                                                                                                                             CATTATTGTTATAGTTTGTATGG 25
                                                                                                                                                                                                                                                                                                                                                                                                     CAATATTGTCATAGTTTGTATGG 284
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /clone lib="QH M sunflower H.argophyllus"
/note="Vector: pBRcDNASfiAB; The library was construct
from three different sources (seedling, root and leaf)
RNA from a single genotype. cDNAs were pooled and
directionally cloned into a custom medium-copy vector.
Details of library construction can be obtained at
http://cgpdb.ucdavis.edu/"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Helianthus argophyllus"
/mol_type="mRNA"
/db xrefe"taxon:73275"
/clone="OHM9H07"
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Pred. No. 4.6e+03;
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TIGR
9712 Medical Co
Tel: 301-838-35
                                                                                                                                                                                                                                                                    1 (bases 1 to 592)

1 (Kozik, A., Michelmore, R.W., Knapp, S., Matvienko, M., Rieseberg, L., Lin, H., van Damme, M., Lavelle, D., Chevalier, P., Ziegle, J., Ellison, P., Kolkman, J., Slabaugh, M.S., Livingston, K., Zhou, Y., Lai, Z., Church, S., Jackson, L. and Bradford, K.

Lettuce and Sunflower ESTs from the Compositae Genome Project http://compgenomics.ucdavis.edu/
Unpublished (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                               Helianthus annuus

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnollophyta; eudicotyledons; core eudicotyledons;

asterids; campanulids; Asterales; Asteraceae; Asteroideae;
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QHG17014.yg.abl QH_EFGHJ sunflower RHA280 Helianthus
clone QHG17014, mRNA sequence.
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                                                                                 Email: akozik@atgc.org [michelmore@vegmail.ucdavis.edu] singleton, see http://cgpdb.ucdavis.edu/ for details. plate: QHG17 row: O column: 14.
                                                                                                                                                                                       Contact: Alexander Kozik [R.W.Michelmore]
Department of Vegetable Crops, R.W.Michelmore
University of California at Davis (UCD)
Asmundson Hall, UCD, Davis, CA 95616, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Email: enta@tigr.org
DNA was provided by Daniel Eichinger
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Other_GSSs: EINCK17TR
Contact: Brendan Loft
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Helianthus annuus (common sunflower)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BU026745.1 GI:22462265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Class: sheared ends.
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                                                                                                                                                                                                                                                                                                                                                                                                                                        Heliantheae, Helianthus.
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                                                                                                                                               1-(530)-742-1742
1-(530)-752-9659
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /clone lib**RI 10 12 KB"
/clone lib**RI 10 12 KB"
/notes**Vector: pHOS2; Site_1: BstXI; Total genomic DNA was isolated from early log phase trophozoites of E. invadens isolated from early log phase trophozoites of E. shotgun IP-1 using a Qiagen plant DNA extraction kit. A shotgun medium-size plasmid library (average insert size of 10 - 12 kb) was generated by random mechanical shearing of E. invadens genomic DNA, repairing the ends of DNA fragments with T4 Polymerase, adding BstXI adaptors and lighting into the BstXI site of a pUC-derived vector pHOS2."
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/organism="Helianthus annuus"
/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Entamoeba invadens"
/mol type="genomic DNA"
/strain="IP-1"
                                                             ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           db_xref="taxon:33085"
clone="EINCK17"
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Pred. No. 4.6e+03;
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ORGANISM
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DX044921/c
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              End sequence of Brassica rapa BamHI (KBrB)
Unpublished (2005)
Contact: Beom-Seok Park
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GSS.
                                                                                                                                                                                                                                                                                            Seq primer: M13 Reverse Class: BAC ends.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sequence.
DX044921
DX044921.1 GI:84739218
                                                                                                                                                                                                                                                                                                                                                   Email: pbeom@rda.go.kr
BAC end sequence of Brassica
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (bases 1 to 770)
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TAG_SEQ=GCTAGTCGGG*
                     by Yong-Pyo Lim
                                                                                                                                                                                                                                                                          Location/Qualifiers
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/db_xref="taxon:4232"
/clone="QHG17014"
                                                                                                                                                                                       organism="Brassica rapa
/mol_type="genomic DNA"
/cultivar="Chiifu"
                                                                                                                                               /sub_species="pekinensis"
/db_xref="taxon:51351"
                                                                                                                             clone="KBrB046A24"
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Pred. No. 4.
                         (CNU) . "
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Brassica rapa subsp. pekinensis
Brassica rapa subsp. pekinensis
Burassica rapa subsp. pekinensis
Eukaryota, Viridiplantae, Streptophyta; Embryophyta; Tracheophyta;
Eukaryota; Viridiplantae, Streptophyta; core eudicotyledons;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons;
rosids; eurosids II; Brassicales; Brassicaceae; Brassica.
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KBrB046A24R KBrB, Brassica rapa BamHI BAC library Brassica rapa
subsp. pekinensis genomic clone KBrB046A24, genomic survey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Brassica Genomics Team
National Institute of Agricultural Biotechnology
225 Seodun-Dong, Suwon, 441-707, Korea
Tel: +82-31-299-1670
Fax: +82-31-299-1672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Yang,T.J., Kwon,S.J., Kim,J.A, Kim,J.S., Lim,K.B., Jin,M., Park,J.Y., Lim,M.H., Kim,H.I., Choi,B.S., Seol,Y.J., Park, Hahn,J.H. and Park,B.S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Separate cDNAs were generated using primers that incorporated unique 5' and 3' tags to distinguish each source of RNA. cDNAs were then pooled, size-fractionated, directionally cloned into a custom medium-copy vector and transformations made with four size classes to minimize size bias. Details of each source of RNA and library construction can be obtained at http://cgpdb.ucdavis.edu/
/lab host="E.coli DH10B"
/clone_lib="KBrB, Brassica rapa BamHI BAC library"
/note="Tector: pCUGIBAC1; Site_l: BamHI; Brassica rapa spp
pekinensis var. Chiliu BAC library (KBrB BAC) is provided
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/clone lib="QH_EFRCHJ sunflower RHA280"
/clone lib="QH_EFRCHJ sunflower RHA280"
/note="Vector: pBRCHJ sunflower RHA from a single genotype.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 rapa ssp. pekinensis BamHI BAC clone
                                                                                                                                                                                                                                                                                                                                                           subsp. pekinensis"
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CNS07B84/c
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                                                                                                                                                                                                                                                                                                                                                                                             Submitted (08-SEP-2000) Genoscope - Centre National de Sequencage,
2 rue Gaston Cremieux, CP 5706, 91057 ENRY cedex - FRANCE (E-mail:
8 seqref@genoscope.cns.fr - Web: www.genoscope.cns.fr)
This GSS is part of a random genomic sequencing program of thirteen
yeast species: Saccharomyces bayanus var. uvarum, Saccharomyces
exiguus, Saccharomyces servazzii, Zygosaccharomyces rouxii,
Saccharomyces kluyveri, Kluyveromyces thermotolerans, Kluyveromyces
lactis var. lactis, Kluyveromyces marxianus var. marxianus, Pichia
angusta, Debaryomyces hansenii var. hansenii, Pichia sorbitophila,
Candida tropicalis and varrowia lipolytica. Genomic inserts of 3 to
5 kb were prepared and both extremities were sequenced. See
keywords for description of this sequence and for the sequence of
the other extremity of this insert.
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Souciet, J., Aigle, M., Artiguenave, F., Blandin, G.,
Souciet, J., Aigle, M., Bon, E., Brottier, P., Casaregola, S., de
Bolotin-Fukuhara, M., Bon, E., Brottier, P., Casaregola, S., de
Montigny, J., Dujon, B., Durrens, P., Gaillardin, C., Lepingle, A.,
Ilorente, B., Malpertuy, A., Neuveglise, C., Ozier-Kalogeropoulos, O.,
Potier, S., Saurin, W., Tekata, F., Toffano-Nicohe, C.,
Wesolowski-Louvel, M., Wincker, P., and Weissenbach, J.
Genomic exploration of the hemiascomycetous yeasts: 1. A set of
Prest species for molecular evolution studies
  v
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Lepingle, A., Casaregola, S., Neuveglise, C., Bon, E., Nguyen, H., Artiguenave, F., Wincker, P. and Sallardin, C. Genomic exploration of the hemiascomycetous yeasts: 14. Debaryomyces hansenii var. hansenii PEBS Lett. 487 (1), 82-86 (2000)
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Debaryomyces hansenii, genomic survey sequence.
AL437546
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Debaryomyces hansenii var. hansenii
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                                               Conservative
                                                                                                                                                            /variety="hansenii"
/db_xref="taxon:58641"
/clone="BCOAA010A01"
/clone lib="BCOAA"
/note="end : T7"
                                                                                                                                                                                                                                                                                  /organism="Debaryomyces
/mol_type="genomic DNA"
/strain="CBS 767"
                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
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Pred. No. 4.6e+03;
                                                                     Score 19.8; DB 14; Pred. No. 4.6e+03;
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Brassica rapa subsp. pekinensis

Brassica rapa subsp. pekinensis

Brassica rapa subsp. pekinensis

Sukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons;
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BAC end sequence of Brassica rapa
Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AJ854876 1268 bp DNA 11:
Brassica rapa subsp. pekinensis GSS, clone KB:
primer M13 (forward), genomic survey sequence.
AJ854876
1 (bases 1 to 170)
Chen, B., Li,Y., Peng,Y., Dong,H. and Li, Large-scale identification of ESTs from normalized cDNA library sequencing
                                                                   Eukaryota; Fungi; Ascomycota;
Sordariomycetes incertae sedis
                                                                                                    Magnaporthe grisea (anamorph: Pyricularia grisea)
Magnaporthe grisea
                                                                                                                                            CK928648.1
EST.
                                                                                                                                                                                                           CK928648 170 bp mRNA linear EST 22-APR-2004 p5rmgcr_004935 Normalized Magnaporthe grisea cDNA pGEM-T Easy library Magnaporthe grisea cDNA clone p5rmgcr_004935, mRNA
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Tel: +44 1603 450843
Fax: +44 1603 450021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: Ian Bancroft
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Submitted (05-NOV-2004) Beckett P., (Innes Centre, Norwich Research Park, 7UH, UNITED KINGDOM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AJ854876.1 GI:55651482
GSS; genome survey seque
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M13(forward)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /clone="KBrH051F18"
/clone_lib="Brassica rapa BAC
pCUGIBac1; Site_1: HindIII"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Brassica rapa
/mol_type="genomic DNA"
/cultivar="Chiifu"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sub_species="pekinensis"
db_xref="taxon:51351"
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                                                                                                                                                            GI:45416499
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Pred. No. 4.7e+03
                                                                     sedis; Magnaporthaceae;
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S, clone KBrH051F18, e
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                  Magnaporthe grisea by
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                                                                      Magnaporthe.
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                                                                                                                                                                                                                                                                                                                             Hominidae; Homo.

1 (bases 1 to 232)

1 (bases 0, Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R., Diss Neto,B., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R., Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F., Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H., Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and Simpson,A.J.
             Fax: +55-11-2707001

Email: asimpson@ludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL (http://www.ludwig.org.br/scripts/gethtml2.pl?tl=PM2&t2=PM2-NN0169-190301-006-b03&t3=2001-03-19&t4=1)
Seq_primer: puc 18 forward
                                                                                                                                                                                Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 and
                                                                                                                                                                                                                                                                                            Shotgun sequencing sequence tags
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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PM2-NN0169-190301-006-b03
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Seq primer: M13 forward primer.
Location/Qualifiers
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Laboratory of Subtropical Bioresource Conservation
Guangxi University, China Agricultural University,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unpublished (2004)
                                                                                                                                               Tel: +55-11-2704922
                                                                                                                                                                    Brazi
                                                                                                                                                                                                                                          Contact: Simpson A.J.G.
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/clone="p5rmgcr_004935"
/t1msue_type="Mycellium,
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|mol type="mRNA"
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Zinnia elegans Zinnia elegans Zinnia elegans Zinnia elegans Zinnia elegans Embryophyta; Tracheophyta; Bukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons; asterids; campanulids; Asterales; Asteraceae; Asteroideae; Heliantheae; Zinnia.
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Novel markers of xylogenesis in zinnia are by auxin and cytokinin
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Location/Qualifiers
                                                                                                                                                                                                                                                                                                                       Email: goffner@scsv.ups-tlse.fr
                                                                                                                                                                                                                                                                                                                                                                    Tel: 33 5 62 19 35 23 Fax: 33 5 62 19 35 02
                                                                                                                                                                                                                                                                                                                                                                                                           signalisations chez les vegetaux
Pule de Biotechnologies Vegetales, 24
17 Auzeville, 31326 CASTANET-TOLOSAN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               UMR 5546 CNRS/Universite Paul Sabatier Surfaces cellulaires et
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Differenciation du xyleme : Signaux cellulaires
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Deborah Goffner
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DV017521.1 GI:76151574
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                                                                                                                                                                                                                                                                                 CR PRimers
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                                                                                                                                                                         primer: M13-reverse
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                                      /organism="Zinnia elegans"
/mol_type="mRNA"
/cultivar="Envy"
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/db_xref="taxon:34245"
/clone="2p-e5"
                                                                                                                            Location/Qualifiers
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/db_xref="taxon:9606"
/dev_stage="Adult"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               . 232
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Pred. No. 5
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A clone 2p-e5,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               204
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Bombyx mori
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N
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Bombycoidea; Bombycidae; Bombyx.
1 (bases 1 to 299)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Lepidoptera; Glossata; Ditrysia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Contact: Zhonghuai Xiang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACATTATTGTTATAGTTTGTATGGAA 27
                                                                                                                                                                                                                                                                                                                                        86-23-68251123
86-23-68251128
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/lab host="E.coli DH5alpha"
/clone_lib="LXL"
/clone_lib="LXL"
/note="Vector: pGEM-T; Site 1: Sall, Site 2: NdeI; LXL (Late Xylogenesis Library). SSH (suppressIon subtractive hybirdization) library made with tester sample comprising pooled RNA from 48, 60 and 72h of cell culture in differentition medium (supplemented with auxin NAA and cytokinin BAP) and driver sample comprising pooled RNA from 0h of culture and 48, 60 and 72h in control conditions (with NAA only, with BAP only and with no hormone)"
                                                                                                                                                                                                                                                                             xzh@swau.cq.cn.
Location/Qualifiers
/tissue_type="Fat body (pupa)"
/dev stage="p0"
/clone lib="sw1"
/note="Vector: pBluescript II SK(+)"
                                                                                                             /mol_type="mRNA"
/strain="DaZhao(P50)"
/db_xref="taxon:7091"
/sex="mixed"
                                                                                                                                                                                                                        organism="Bombyx mori"
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84.6%;
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Pred. No. 5.4e+03;
0; Mismatches 4;
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REFERENCE AUTHORS

SOURCE

ORGANISM

KEYWORDS **VERSION** ACCESSION DEFINITION Shoot

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Best Local S
Matches 22
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JOURNAL
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                                          AUTHORS
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Danio rerio (zebrafish)
Danio rerio
Danio rerio
Danio rerio
Danio rerio
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostc
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostc
Eukaryota; Metazoa; Chordata; Catariophysi;
Cypriniformes; Cyprinidae; Danio.
1 (bases 1 to 340)
1 (bases 1 to 340)
Clark, M., Johnson, S.L., Lehrach, H., Lee, R., Li, F., Marra, M.,
Eddy, S., Hillier, L., Kucaba, T., Martin, J., Beck, C., Wylie, T.,
Underwood, K., Steptoe, M., Theising, B., Allen, M., Bowers, Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Oryzias latipes (Japanese medaka)
Oryzias latipes
Oryzias latipes
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Eukaryota; Metazoa; Chordata; Teleostei; Euteleostei; Neoteleostei;
Actinopterygii; Neopterygii; Percomorpha; Atherinomorpha;
Acanthomorpha; Acanthopterygii; Percomorpha; Atherinomorpha;
Beloniformes; Adrianichthyidae; Oryziinae; Oryzias.
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fx17a03.y1 Zebrafish SJD day
IMAGE:5620108 5', mRNA sequer
EM857946
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National Institute of Genetics
1111 Yata, Mishima, Shizuoka 411-8540, Japan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unpublished (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Kohara,Y., Shin-i,T., Kimura,T., Narita,T., Jindo,T. and
Medaka EST Project in Takeda's lab
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BJ724011.1 GI:45265103
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACATTATTGTTATAGTTTGTATGGAA 27
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Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /db_xref="taxon:8090"
/clone="MF01FFA031d06"
/sex="mixture of female and m
/tissue_type="whole embryo"
/dev_stage="fry_stage_40"
/clone_lib="MF01FFA_CDNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Oryzias latipes"
/mol_type="mRNA"
/strain="Hd-rR"
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                                                                                                                                                                                                                   5', mRNA sequence.
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Pred. No. 5.
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Contact: Stephen L. Johnson Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington University School of Medicine Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington Washington W
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cDNA Library construction by: Joe Barnes and Steve Johnson. DNA
Sequencing by: Washington University Genome Sequencing Center Clone
distribution: RessourcenZentrumPrimarDatenbank, Berlin, Germany
(web address: www.rzpd.de)
rebrafish identity (p-value greater than 1e-99) found to:
gi|3461292|gb|AI105787|AI105787 db03d09_pl ZF adult heart library
Danio rerio
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/clone_lib="Zebrafish_SJD_day_3 embryo"
/note="Vector: pAMP1; Site_1: EcoR1; Site_2: Not1; First
strand_cDNA synthesis was primed_using_oligo-dT on
magnetic_beads with an additional primer
5'-gcggccgctaatacgactcactatag-3' and
5'-gcggccgctaatacggactcactatag-3' and
5'-aagcagtggtaacaacgcagagtacttt-tttttttttvn-3'. cDNA
was subsequently_amplified in a 7-cycle PCR with the
following primers: 5'-ggccgctaatacgactcactatag-3' and
5'-aagcagtggt-aacaacgcag. Deoxy-UMP adaptors were added in
a third PCR (5 cycles) and the primers
5'-cuacuacuacuaaagcagtggtaacaacgcagagstec-3'. Ends were
treated with uracil DNA glycosylase and product with 3'
overhangs was annealed to complementary ends of pAMP1.
Insert can be excised using EcoR1 and Not1. Library
constructed by Joe Barnes and Steve Johnson (Washington
University)."
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RESULT 1
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ID AAT72389 standard; DNA; 32 BP.
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AC AAT72389;
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DE Human Papillomavirus Type 18 tar
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Human Papillomavirus; probe; tar
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EPT 6974518-A2.
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PN 8P774518-A2.
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PF 15-NOV-1996; 96EP-00308264.
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                                                   Probes for detection of Human Papillomavirus Type 16 and Type 18 - can distinguish between Type 16 and 18, associated with genital cancers.
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                          Claim 16; Page 61; 70pp; English
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Acn45597 Cotton pr
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Adt18740 Plant cDN
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Novel hybridisation assay probes have been developed comprising an

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Matches 32
                           Novel hybridisation assay probes have been developed comprising an oligonucleotide which will hybridise under selected conditions to Human papillomavirus (HPV) Type 16 and/or 18 (but not Types 6, 11, 31, 33, 35, 39, 45, 51, 52, or 58) target nucleic acids to form detectable target: probe duplex. The present sequence represents a specifically claimed helper probe. Oligonucleotides are useful to detect HPV Type 16 and/or 18 in samples e.g. cervical smears, body fluid, and distinguish these from other HPV variants. Papillomaviruses are small DNA viruses and HPV Types 16 and 18 are associated with genical cancers. HPV CR primers can
                                                                                                                                                                                                                                                                                                                                                                         Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                Probes for detection of Human Papillomavirus Type 16 and Type 18 -distinguish between Type 16 and 18, associated with genital cancers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cervical smear; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human Papillomavirus; probe; target region; genital cancer; HPV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human Papillomavirus Type 18 helper probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-FEB-1998 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAT72397 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 32 BP; 8 A; 8 C; 7 G; 9 T; 0 U; 0 Other;
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   amplify HPV Type 16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gordon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15-NOV-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (GENP-) GEN-PROBE INC.
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      and/or 18
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RESULT 3
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                                                        CC Oligonucleotide which will hybridise under selected comprising an CC Oligonucleotide which will hybridise under selected conditions to Human CC papillomavirus (HPV) Type 16 and/or 18 (but not Types 6, 11, 31, 33, 35, CC 39, 45, 51, 52, or 58) target nucleic acids to form detectable target: CC probe duplex. The present sequence represents a specifically claimed CC helper probe. Oligonucleotides are useful to detect HPV Type 16 and/or 18 in samples e.g. cervical smears, body fluid, and distinguish these CC from other HPV variants. Papillomaviruses are small DNA viruses and HPV CTypes 16 and/or 18 mucleic acid in a sample. HPV Type 16 and/or 18 can be detected by adding a probe and detecting probe:target CC and/or 18 can be detected by adding a probe and detecting probe:target CC unlex formation; target nucleic acid is optionally amplified. Type 16 cone specifically claimed PCR primers. For Type 18 detection, a helper CC probe may be used. Oligonucleotides can distinguish target sequences from CC phylogenetically close HPV Types 16 and 18 whilst available detection CC sera react with antigens of all papillomaviruses
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Probes for detection of Human Papillomavirus Type 16 and Type 18 - can distinguish between Type 16 and 18, associated with genital cancers.
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Pred. No. 9.2e-05;
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Sequence 32 BP; 9 A; 7 C; 8 G; 0 T; 8 U; 0 Other;

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RESULT 4
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                                                                                                                  Query Match
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                                                                                                                                                                           Sequence 32 BP; 8 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel hybridisation assay probes have been developed comprising oligonucleotide which will hybridise under selected conditions t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 16; Page 61; 70pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Probes for detection of Human Papillomavirus Type 16 and Type 18 - distinguish between Type 16 and 18, associated with genital cancers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gordon P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15-NOV-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human Papillomavirus Type 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (GENP-) GEN-PROBE INC
                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24;
                                                               32;
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   TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 32
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                                                               Conservative
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                                                                                                                                                                           8 C; 7 G; 0 T; 9 U; 0 Other;
                                                                                          100.0%;
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Pred. No.
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No. 9.2e-05;
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                                                                                          9.2e-05;
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                                                                                                                     Length 32
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RESULT 6
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Matches 32
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23-MAY-1994;
27-MAY-1994;
13-SEP-1994;
                                                                                                                                                                                                                                                           HPV-18 E6 cDNA (given in AAQ97848) was amplified from a HeLa cell cDNA library using the primers given in AAQ97846-47. The gene was subcloned into a baculovirus vector for expression of recombinant E6 in Sf9 insectells for use as a component of an in vitro ubiquitin conjugating syst (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                  Identifying inhibitors of ubiquitin mediated proteolysis of cell cycle regulatory proteins - also new ubiquitin conjugating enzymes, their related nucleic acid, vectors, antibodies etc., useful for regulating e.g. cell proliferation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ubiquitin-conjugating enzyme; HPV-18 E6 protein; cell proliferation; cancer; psoriasis; fibrosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-MAR-2003
06-DEC-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAQ97848 standard; cDNA;
                     HPV-18 E6 coding sequence.
                                                                   AAZ27568;
                                                                                       AAZ27568 standard; cDNA; 476
                                                                                                                                                                                                                                      Sequence 476
                                                                                                                                                                                                                                                                                                                             Disclosure; Page 100-101; 157pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                            Draetta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
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Ubiquitin conjugating enzyme;
                                             15-DEC-1999
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                                                                                                                                               301 TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 332
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                                                                                                                                                                                           Conservative
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94US-00247904.
94US-00250795.
94US-00305520.
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                                                                                                                                                                                                          100.0%;
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Pred. No.
  UbCE;
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  ubiquitin-mediated
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; cell cycle;
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 proteolysis;
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XW ubiq
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                                                                                                                                                                                                                                                                                                                                                                      This sequence encodes the human papillomavirus E6 protein. The invention C2 relates to assays for identifying an inhibitor of ubiquitin-mediated C2 proteolysis of a cell-cycle regulatory protein comprising contacting a C2 candidate agent with an ubiquitin-conjugating system and measuring the C3 reconstituted protein mixture including a ubiquitin conjugating enzyme C4 reconstituted protein mixture including a ubiquitin conjugating enzyme C5 (UbC8) produced by the expression of a nucleic acid which hybridizes C6 under high stringency conditions to human UbC8, candida albicans UbC8, or C6 chizosaccharomyces pombe UbC8 coding sequences; (b) a regulatory protein c7; and (c) ubiquitin. The polynucleotides are useful for identifying C6 ubiquitination inhibitors. The polynucleotides, polypeptides, antisense C7 compounds and antibodies against them may also be useful for the C6 treatment and/or diagnosis of proliferative disorders (e.g. cancer, C6 atherosclerosis, or restenosis), tissue connective disorders, controlling cound healing, and disorders characterized by fibrosis (e.g. rheumatoid C7 arthritis, insulin dependent diabetes mellitus, glomerulonephritis,
                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                       Query Match
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23-MAY-1994;
27-MAY-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cell-cycle regulatory protein; ubiquitination inhibitor; atherosclerosis; proliferative disorder; cancer; restenosis; tissue connective disorder; wound healing; fibrosis disorder; rheumatoid arthritis; scleroderma; insulin dependent diabetes mellitus; glomerulonephritis; cirrhosis; diagnosis; therapy; E6; ds.
                                            cDNA encoding HPV-18 E6 protein.
                                                                              15-SEP-2003
23-OCT-2000
                                                                                                                            AAA61623;
                                                                                                                                                            AAA61623
                                                                                                                                                                                                                                                                                                                                                                     Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13-SEP-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Identifying ubiquitination inhibitors using novel ubiquitin conjugating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (MITO-)
                                                                                                                                                                                                                                                                                                                      Local
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                                                                                                                                                                                                                                                                                                     l Similarity
32; Conserv
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                                                                                                                                                                                                                                                                                                                                                                   476 BP; 163 A; 95 C;
                                                                                                                                                            standard;
                                                                                                                                                                                                                                          TTATTAATAAGGTGCCTGCGGTGCCAGAAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cottarel G,
                                                                                                                                                                                                                                                                                                                                                                                                      and scleroderma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Col 89-92; 61pp; English.
                                                                                                                                                                                                                                                                                                     100.0%;
ilarity 100.0%;
Conservative
                                                                            (revised)
(first en
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94US-00247904.
94US-00250795.
94US-00305520.
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                                                                                                                                                            CDNA;
                                                                              entry)
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                     118 T; 0 U; 0 Other;
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HPV-18 E6; ubiquitin mediated proteolysis; cellular protein half life; ubiquitination inhibitor; p53; cyclin; cell cycle regulator;

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myc deregulation; human papillomavirus; HPV-18 E6 protein; cervital cancer; skin cancer; epidermal hopplasia; epidermal neoplasia; psoriasis; connective tissue disorder; wound healing; cytostatic; antiproliferative; anticancer; antipsoriatic; ss.
papillomavirus; 18
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Location/Qualifiers /product= "HPV-18 E6 protein" /note= "No stop codon given in the specification" partial *tag= a

04-JAN-1994; 23-MAY-1994; 17-DEC-1996; 30-MAY-2000 94US-00176937 94US-00247904 96US-00767942

US6068982-A.

13-SEP-1994; 27-MAY-1994; 94US-00250795. 94US-00305520. 95US-00486663.

(MITO-)

Chiu MI, Cottarel G, Berlin V, Draetta G, Damagnez V, Rolfe 3

2000-410854/35 AAB03176.

the protein in the presence of candidate agent an inhibitor of ubiquitin mediated proteolysis of regulatory treating cancers involves measuring ubiquitination levels of in the presence of candidate agent in an eukaryotic cell.

Example 2; Col 97-98; 73pp; English.

CC Candida albicans or Schizosaccharomyces pombe ubiquitin-conjugating CC enzyme (AAB03169-B03171), a cell cycle regulatory protein (such as p53) CC and dechizosaccharomyces pombe ubiquitin-conjugating condidation also discloses novel Candida albicans CC and Schizosaccharomyces pombe ubiquitin-conjugating enzymes, caUDCE and controlled controlled (AAB03170, AAB03171), and two novel human ubiquitin-conjugating CC enzymes, hUDCE and rapUBC (AAB03189, AAB03173). The ubiquitin-mediated CC proteolysis system is the major pathway for the selective, controlled CC controlled controlling the levels of proteins involved in cell cycle important in controlling the levels of proteins involved in cell cycle CC progression. Alterations in the ubiquitination of these proteins may CC therefore play a role in the development of cancers. For example, human CC papillomaviruses such as HPV-18 encode a transforming protein, E6 CC (AAB03176), which combines with a cellular B6-associated protein (E6-AP; CC (AAB03177) to stimulate the ubiquitination of p53, thus targetting it for CC degradation. The ubiquitination inhibitors identified according to the process. They are also useful in treatment of cervical cancers and CC conditions such as psoriasis, neoplastic epidermal conditions, skin C cancers e.g., basal cell carcinomas, squamous cell carcinomas. The cancers are useful for deregulating myc expression and rendering the CC inhibitors are useful for deregulating myc expression and rendering the CC cells sensitive to chemotherapeutic treatment of to uset the balance of transformed cells and cause apoptosis to occur. Inhibitors of ubiquitin-cell cancers and cause apoptosis to occur. Inhibitors of ubiquitin-cells processors of ubiquitin-cells The invention relates to a method of identifying an inhibitor of ubiquitin-mediated proteolysis of a cell cycle regulatory protein comprising contacting an engineered eukaryotic cell with a candidate The eukaryotic cells is engineered to express a recombinant human

Query Match
Best Local Similarity
Matches 32; Conserv

Conservative

0

Mismatches

100.0%; A; 96 C;

Score 32; Pred. No.

0.00016;

DB 10;

Length 477; Indels

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Gaps

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477

BP; 163

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118 T; 0 U; 0

Other;

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                            The invention relates to a novel method for selective post-translational CC silencing in a mammalian cell of the expression of an exogenous gene of cviral origin. The method comprises introducing into the cell a small CC interfering RNA (siRNA) construct that is homologous to a part of the method comprises introducing into the selective post-cc transcriptional silencing of an exogenous gene of viral origin (e.g. an CC compose or human papilloma virus (HPV) gene) in a mammalian cell. The CC method or the siRNA is particularly useful for treating cancer, human CC corvical cancer, human immunodeficiency virus (HIV), smallpox, flu, CC common cold, or a disease caused by a HPV (e.g. genital warte, cervical CC cancer, penile cancer, malignant squamous cell carcinomas or verruca CC vulgaris). An siRNA construct or vector is useful for use as a medicament CC compon the diseases mentioned. The polynucleotide sequence of the invention CC can be used to treat disorders by gene therapy. This polynucleotide cotted invention CC can cer represents the DNA of a HPV siRNA sequence of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Virucide; cytostatic; anti-HIV; dermatological; small interfering RNA; selective post-translational silencing; siRNA; oncogene; genital wart; human papilloma virus; HPV gene; cancer; human cervical cancer; HIV; smallpox; flu; common cold; cervical cancer; penile cancer; malignant squamous cell carcinoma; verruca vulgaris; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                               Selective post-transcriptional silencing of an exogenous viral gene (e.g human papilloma virus (HPV) B6), for treating e.g. cancer, comprises using a small interfering RNA (siRNA) construct homologous to an mRNA of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-JUL-2001; 2001GB-00017358
14-JAN-2002; 2002GB-00000688
17-JUN-2002; 2002GB-00013855
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                                                                                                                                                                                                                                                                                                                            Claim 11; Fig 11; 44pp; English
                                                                                                                                                                                                                                                                                                                                                                the gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-221850/21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Milner
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-JUL-2002; 2002WO-GB003300.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (MILN/) MILNER A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    siRNA derived DNA sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.00016;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 476;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
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RESULT 9
ADO44101
ID ADO4
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                                                               Matches
                                                                                                                                               The present sequence encodes an E6 polypeptides from human papillomavirus type 18 (HPV18). The specification describes human papillomavirus E6 and E7 polypeptides, where the E7 polypeptide has mutations at any one or more of the amino acids corresponding to amino acids 24, 26 or 91 of the sequence given in ADO44073 and the E6 polypeptide has no mutations or has mutations at any one or more of the amino acids corresponding to amino acids 33 or 106 of there sequence given in ADO44072. The polypeptides of the invention are useful for treating or preventing human papillomavirus (HPV)-associated cancers, such as cervical cancer. The fusion proteins and nucleic acids encoding the fusion proteins are useful for generating immune responses against HPV. They are also useful for treating lower gastrointestinal tract cancers, e.g. anal cancer, and other cancers of the reproductive system, including penile and vulvar cancer.
                                                                                                                                                                                                                                                                                                                                                                                                    New polypeptide comprising human papillomavirus E6 and useful for treating or preventing human papillomavirus cancers, e.g. cervical cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          E6 protein; E7 protein; fusion protein; HPV16; HPV-associated cancer; cervical cancer; immune response; lower gastrointestinal tract cancer; anal cancer; reproductive system cancer; penile cancer; vulvar cancer;
                                                                                                                       Sequence 477
                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 94; 101pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Smith
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              03-OCT-2002; 2002US-0415929F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           02-OCT-2003; 2003WO-US031726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-APR-2004.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human papillomavirus type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADO44101;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (AMHP ) WYETH HOLDINGS CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2004-316328/29.
)B; ADO44074.
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 301
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                                                                             Similarity
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                 TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 32
TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cassetti MC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sequence of the E6 polypeptide of HPV18.
                                                                                                                       BP; 164 A; 96 C; 99 G; 118 T; 0 U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
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1. .477
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/product= "E6 polypepyide"
                                                                          100.0%;
                                                        0,
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                                                          Score 32; DB Lz;
Pred. No. 0.00016;
                                                                                                                         0 Other;
                                                                                        Length 477;
                                                             Indels
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                                                           0
                                                           Gaps
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AAQ75471
ID AAQ7
XX
AC AAQ
DT 16-(
DT 25-N
DT 28--
XX
XX
XX
HPV
XX
XW HPV
XW CET
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                                                                                                                                                                             RESULT 11
                                                                                                                                                                                                                                                                         Matches
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                                                                   16-OCT-2003
25-MAR-2003
28-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                 The present invention relates to a method and composition comprising a transfer agent and a solid or colloidal carrier medium for delivering biological agents into cells. The invention is useful for the treatment of cancer, tumor, carcinoma of cuttaneous, squamous or cervical ppithelia and colorectal carcinoma, wounds, burns and scars. The invention is also useful in gene therapy. The present sequence is the human papillomavirus type 18 E6/E7 gene fragment. This sequence is useful in a method for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Delivery mechanism; gene therapy; cytostatic; vulnerary; injury; infection; cancer; gastrointestinal disease; gyneocology and obstetrics; tumor; colorectal tumor;
HPV; HPV18; E6 cervix cancer;
                                          HPV18 E6/E7
                                                                                                                         AAQ75471;
                                                                                                                                                  AAQ75471 standard; DNA; 483
                                                                                                                                                                                                                                                                                                                             Sequence 477 BP; 164 A; 95 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; SEQ ID NO 15; 56pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Composition useful for delivering an agent into a cell comprises agent, a transfer agent and a solid or colloidal carrier medium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2005-405310/41.
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05-MAR-2004; 2004US-0549919P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human papillomavirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            E6 gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gyneocology and obstetrics; tumor; colorectal tumor;
uterine cervix tumor; squamous cell carcinoma; neoplasm;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human papillomavirus type 18 E6/E7 gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-AUG-2005
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (MILN/) MILNER A J.
                                                                                                                                                                                                                                                                                     Local
                                                                                                                                                                                                                      301 TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 332
                                                                                                                                                                                                                                                                         l Similarity
32; Conserv
                                                                                                                                                                                                                                       TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 32
                                                                                                                                                                                                                                                                                                                                                       carcinomas.
                                                                                                                                                                                                                                                                       100.0%; Score 32; DB 14; ilarity 100.0%; Pred. No. 0.00016; Conservative 0; Mismatches 0;
                                        proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                  (revised)
(revised)
(first en
  protein;
                                                                   entry)
               E7
               protein;
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                                                                                                                                                    ВP
                                                                                                                                                                                                                                                                                                                              100 G; 118 T; 0 U;
               diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            fragment,
                cervical dyplasia;
                                                                                                                                                                                                                                                                                                                               0 Other;
                                                                                                                                                                                                                                                                                                  Length 477;
                                                                                                                                                                                                                                                                          Indels
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RESULT 12
AAN91786
ID 9786
ID 27-AU
AC AAN91
XX 27-AU
DT 25-MA
DT 16-MA
DT 16-MA
CETVI
XX CETVI
XX WO890
XX Humar
XX W0890
PD 19-OC
XX 19-OC
XX 19-OC
XX 19-MA
PR 04-AI
PR 04-AI
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Best Local S
Matches 32
                                                                                                                                                                                                                                                                                                                                                                                                                                          27-AUG-2003
25-MAR-2003
16-MAR-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The sequences of the E6 and E7 polypeptide-encoding regions of human papillomavirus (HPV) 16 and 18 are given in AAQ75470-71 and the encoded proteins in AAR63865-66, respectively. Probes and primers based on these sequences were used for HPV infection diagnosis; expression of E6 and E7 is diagnostic for cervical cancer or pre- malignant states. (Updated on 25-MAR-2003 to correct PN field.) (Updated on 16-OCT-2003 to standardise
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human papilloma virus detection assay - by amplification using self sustained sequence replication and hybridisation with a detector property.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cbs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 483 BP; 167 A; 95 C; 100 G; 121 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Brown
                                                                       04-APR-1988;
31-MAR-1989;
                                                                                                                                              04-APR-1989;
                                                                                                                                                                                                                                            WO8909940-A.
                                                                                                                                                                                                                                                                                            Human papillomavirus
                                                                                                                                                                                                                                                                                                                                            Cervical cancer.
                                                                                                                                                                                                                                                                                                                                                                                          DNA probe complementary to human papilloma virus type 18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAN91786;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    P-PSDB;
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                                                                                                                                                                                              19-OCT-1989.
                         (ONCO-) ONCOR INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (BAXT ) BAXTER
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                     (revised)
(revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DIAGNOSTICS INC
                                                                         88US-00177404
89US-00330381
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1. .480
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                                                                                                                                                                                                                                                                                            type 18
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Pred. No. 0.00016;
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ID AAQ29
XX AAQ29
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25-MAR-2003
09-MAR-1993
  WPI; 1992-349219/42.
P-PSDB; AAR27726, AAR27727, AAR27728.
                                                                                                                                                                 14-MAR-1991;
                                                                                                                                                                                                                                                              01-OCT-1992.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 802 BP; 269 A; 158 C; 182 G; 193 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Obtd. by cutting HPV18 with BamHI and Sau3A. The patent describes probes (DNA or RNA) and their complements capable of detecting one or a combination of HPV types 6, 11, 16, 18, 31, 33 and 35. (Updated on 25-MAR -2003 to correct PR field.) (Updated on 27-AUG-2003 to correct OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rapid detection of specific human papilloma virus genotypes - by hybridisation of DNA digest with new labelled nucleic acid probes.
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                                                                         Boursnell MEG,
                                                                                                                                                                                                               10-MAR-1992;
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                                                                                                                     IMMUNOLOGY
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(revised)
(first entry)
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                                                                                                                                                                 91GB-00005383
                                                                                                                                                                                                               92WO-GB000424
                                                                    Inglis SC,
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/note= "third
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/note= "reading
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Recombinant virus vectors encoding human papillomavirus proteins - for treating and vaccinating against HPV infections and conditions caused them, such as cervical cancer.

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Disclosure; Fig 1b; 83pp; English

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The fragment of DNA contg. the HPV-18 B6/E7 coding region was prepd. by PCR from plasmid pBR322/HPV18 (Boshart et al., EMBO J. 3; 1151) using oligonucleotides SO1 and SO2. The DNA prod. has a site for NcoI at the beginning of the E6 gene and a SmaI site immediately downstream of the termination codon for E7. The E6 and E7 ORFs are fused together to form a single continuous ORF via site directed mutagenesis and the immortilising potential of E7 is removed by altering two key codons of the HPV E7 sequence. The single ORF of HPV-18 E6/E7 may be inserted into vaccinia virus DNA at neutral sites (pref. by inserting two sets of the DNA in opposite orientations to overcome the problem of intertypic recombination) to make a recombinant virus vector for use immunotherapeutically to activate cells of the immune system against HPV. See also AAQ29385-400 and AAQ29450-69. (Updated on 25-MAR-2003 to correct PN field.) (Updated on 24-OCT-2003 to standardise OS field)

Sequence 817

BP; 266 A; 173 C; 177 G; 201 T; 0 U; 0 Other;

Score

DB 2;

Length 817;

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AAX79800
ID AAX78
XX AAX78
AC AAX78
AC AAX78
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AC AAX78
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Matches 32
AAX78791-X78801 represent nucleic acid sequences which encode novel constructs comprising an E6 or E7 protein or E6/E7 fusion protein f HPV (represented in AAY25375-Y25386). These constructs are optional
                                                                                                                                                                                                                                                                                                              Fusion protein; E6 protein; E7 protein; E6/E7; immunomodulator; tumour; immunological fusion partner; CpG oligonucleotide; immune response; HPV antigen; prevention; treatment; ss.
                                                                    Composition comprising induce immune response
                                                                                                                                        Dalemans WLJ,
                                                                                                                                                                                                                                 08-JUL-1999.
                                                                                                                                                                                                                                                                                                                                                             HPV fusion
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                                                                                                                                                                                                                                                                                                                                                                                                                                AAX78800 standard; DNA; 837
                                                                                                                                                                                     24-DEC-1997;
                                                                                                                                                                                                          18-DEC-1998;
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                                                                                                                                                                                                                                                                                         Synthetic
                                                                                                                                                               (SMIK )
                                                                                                                 1999-405485/34.
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                                                                                                                                                                                                                                                                             papillomavirus.
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                                             XI; Page 59;
                                                                                                       AAY25385
                                                                                                                                                               SMITHKLINE BEECHAM BIOLOGICALS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
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                                                                                                                                                                                                                                                                                                                                                           protein D1/3-E6-His/HPV18 DNA.
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                                                                                                                                        Gerard CMG
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                                             62pp; English
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No.
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                                                                               fusion protein from HPV
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RESULT 15
AAX297B9
ID AAX297B9
ID AAX297B9
ID AAX29
AC AAX29
AC AAX29
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AC AAX29
AC AAX29
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AC SWIN
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                                                                                                                                                                                                                                           This sequence represents the coding region for a chimeric E6 or E7 protein or E6/E7 fusion protein from Human papillomavirus (HPV) linked the an immunological fusion partner, in this case, a fragment of the Haemophilus influenzae B protein D. The sequence also contains a histidine tag at the C-terminus of the encoded protein. The protein can be used in a vaccine, for immuno-therapeutically treating HPV induced tumour lesions (benign or malignant) and preventing HPV viral infection. (Updated on 17-OCT-2003 to standardise OS field)
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                                                                                                                                                                                               Sequence 837 BP; 283 A; 169 C; 167 G; 218 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Fig 22; 95pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human Papilloma Virus (HPV) fusion proteins - useful in vaccines treatment or prophylaxis of HPV induced lesions.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Prot.D1/3-E6-His/HPV18 coding sequence.
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22-JUN-1999
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DB, AAY02641.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   E6; E7; fusion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cabezon Silva T,
                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       influenzae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97GB-00017953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98WO-EP005285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       benign;
                                                                                                                        100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          malignant; virus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein; protein
                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Delisse AEF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          쁌
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                        Score 32;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 32; DB 2;
Pred. No. 0.00018;
                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                     0.00018;
                                                                                                                                                    DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            D; vaccine; immunotherapy;
infection; ss.
     665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gerard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
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                                                                                                                                               Length 837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0 Other;
                                                                                                 Indels
                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                               11nked to
                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         for
                                                                                                 0
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RESULT 17
ADV85648
ID ADV85
XX
AC ADV85
XX
DT 10-MA
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AED52652
                                                                                                                                                                                                       밁
                                                                                                                              8
                                                                                                                                                                  Query Match
Best Local S
                                                                                                                                                        Matches
                                                                                                                                                                                                                                     The invention relates to human Papilloma virus (HPV) fusion proteins, linked to an immunological fusion partner that provides T helper epitopes to the HPV antigen. Vaccine formulations comprising the fusion proteins are useful in the treatment or prophylaxis of HPV induced lesions (papillomas, warts and cervical cancer). HPV 16 (and HPV 18) E6 and E7 proteins (singly, as an E6-E7 fusion or mutated) were fused to either Haemophilus influenzae D protein (20-127), the C-terminus of Streptococcus pneumoniae Lyra protein (CLyra) or thioredoxin. The present sequence encodes an HPV-H. influenzae D protein, fusion protein of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human papillomavirus
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rusion protein;
virucide; uterin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  04-MAR-2005.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IN9801903-I4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Fusion protein D1/3-E6-His(HPV18), DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-DEC-2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AED52652;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AED52652 standard; DNA; 837
 10-MAR-2005
                       ADV85648;
                                             ADV85648 standard; DNA; 843
                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                Example 16; Fig 22; 96pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2005-557648/57
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tyrrell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chimeric.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Haemophilus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (SMIK)
                                                                                                           634 TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 665
                                                                                                                                                       l Similarity
32; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                    AWR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SMITHKLINE BEECHAM BIOLOGICALS
                                                                                                                                                                                                                                                                                                                                                                                                                  AED52653
                                                                                                                                                                                                       837
                                                                                                                         TTATTAA TAAGGTGCCTGCGGTGCCAGAAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       otein; vaccine; papilloma; uterine cervix tumor; E6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  influenzae; strain
lomavirus type 18.
                                                                                                                                                        Conservative
                                                                                                                                                                                                    BP; 283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97EP-00179535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98IN-CH001903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /*tag= a
/product= "Fusion protein D1/3-E6-His(HPV18)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
1. .837
                                                                                                                                                      100.0%; Score 32; DB 14; 100.0%; Pred. No. 0.00018; Mismatches 0;
                                                                                                                                                                                                      A; 169 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP
                                                                                                                                                                                                      167 G; 218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cytostatic; papillomavirus infection; ds; gene; D protein.
                                                                                                                                                                                                      T; 0 U;
                                                                                                                                                                              Length 837;
                                                                                                                                                                                                       0 Other;
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340

TTATTAATAAGGTGCCTGCGGTGCCAGAAACC

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The present invention relates to a method (MI) for promoting highly efficient antigen presentation in a mammal, by targeting a preselected condition to an endocytic receptor on an antigen-presenting cell, e.g. a condition of a dendritic cell is the cell endocytic receptor DEC-205. The method comprises exposing dendritic cells from the command to either: a conjugate comprising a preselected antigen covalently bound to an antibody to DEC-205, or a recombinant anti-DEC-205 antibody (genetically engineered to contain at least one preselected antigen on at comprision of the dendritic cells. The sequence encoding an anti-DEC-205 antibody (fragment) is preferably selected from ADV85632 and ADV85633, which encode the heavy or light chain variable region of an anti-DEC-205 antibody. The antigen is targeted to antigen presenting cells through the condition of the anti-DEC-205 antibody, making antigen presentation for immunizing a mammal to prevent or treat a disease such as a condition of single dose at low concentration. The method of the invention is consecuted by acceptably results in induction of cancer. The immunization condition is preferably results in induction of cancer. The immunization of conditions are conditions. The present sequence is a HPV DNA sequence which encodes the E6 and E7 proteins. The present sequence can be used as a vaccine antigen.
   S
                                       Query Match
Best Local Similarity
Matches 32; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-JAN-1995;
31-JAN-1996;
05-JUN-2000;
                                                                                                     Sequence 843 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Promoting antigen presentation comprises targeting antigen to dendritic cells using an anti-DEC-205 antibody.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    P-PSDB; ADV85646, ADV85647.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2005-078933/09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hawiger D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12-MAR-2004; 2004US-00800023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US2004258688-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human papillomavirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cancer; gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cytostatic; Virucide; Antibacterial; Antiparasitic; Vaccine; infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (HAWI/) HAWIGER D.
(NUSS/) NUSSENZWEIG M.
(STEI/) STEINMAN R M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09-AUG-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       papillomavirus E6 and E7 coding sequence,
TTATTAATAAGGTGCCTGCGGTGCCAGAAACC
                                         100.0%; Score 32; DB 14; ilarity 100.0%; Pred. No. 0.00018; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nussenzweig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  96WO-US001383
2000US-00586704
2001US-00925284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ds; antigen.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  95US-00381528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /product= 525. .842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /product=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         location/Qualifiers
                                                                                                      283 A; 170 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          *tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0. .516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Į,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          116pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "E6 protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "E7 protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Steinman
                                                                                                      183 G; 207 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bonifaz L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ
                                                                        Length 843;
                                            Indels
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                                           <u>.</u>
                                           Gaps
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RESULT 19
AAX78801
ID AAX78
XX
XX
AC AAX78
XX
DC AAX78
XX
DT 06-SE
XX
XX
DE HPV f
XX
XW Fusic
KW immur
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AAQ08623
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                                                                                                                                                                                      Matches
                                                                                                                                                                                                Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          misc_binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAQ08623 standard; DNA; 1000
Fusion protein; E6 protein; E7 protein; E6/E7; immunomodulator; tum immunological fusion partner; CpG oligonucleotide; immune response;
                                                   06-SEP-1999
                                                                        AAX78801;
                                                                                                                                                                                                                             Sequence 1000 BP; 341 A; 198 C; 221 G; 240 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                 Example 4a describes the results of the amplification of HPV-18 DNA PCR using primers. (Updated on 24-OCT-2003 to standardise OS field)
                                                                                                                                                                                                                                                                                                   Detection of human papilloma virus -
                                                                                                                                                                                                                                                                                                                                             Cerutti P,
                                                                                                                                                                                                                                                                                                                                                                                      11-NOV-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                              17-MAY-1990.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   DE3838269-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        misc_binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     misc_binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human papillomavirus; 18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HPV-18; HPV-16; amplification; primer; polymerase chain reaction;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HPV-18 fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24-OCT-2003
21-APR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAQ08623;
                              HPV fusion protein D1/3-E6/E7-His/HPV18 DNA.
                                                                                            AAX78801 standard; DNA; 1152 BP.
                                                                                                                                                                                                                                                                                                                          WPI; 1990-156905/21
                                                                                                                                                                                                                                                                                                                                                                                                          11-NOV-1988;
                                                                                                                                                                                                                                                                                                                                                                  (BEHW)
                                                                                                                                              405
                                                                                                                                                                                      l Similarity
32; Conserva
                                                                                                                                                                 1 TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 32
                                                                                                                                                                                                                                                                                 4a; Page 4; 11pp; German.
                                                                                                                                                                                                                                                                                                                                                                  BEHRINGWERKE
                                                                                                                                             TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 436
                                                                                                                                                                                                                                                                                                                                             Whitcomb J,
                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (revised)
(first en
                                                   (first entry)
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/note= "primer
667. .686
                                                                                                                                                                                                                                                                                                                                                                                                          88DE-03838269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note= "primer (AAQ08624) binding 647. .666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /*tag= b
/note= "primer
                                                                                                                                                                                     100.0%; S
100.0%; F
htive 0;
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                                                                                                                                                                                                                                                                                                                                             zijlstra J,
                                                                                                                                                                                                 Score 32;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (AAQ08625)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (AAQ08626)
                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                              Devilliers
                                                                                                                                                                                                0.00019;
                                                                                                                                                                                                                                                                                                     DNA amplification
                                                                                                                                                                                                           DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    binding
                                                                                                                                                                                      <u>,</u>
          immunomodulator; tumour,
                                                                                                                                                                                                        Length 1000;
                                                                                                                                                                                                                                                                                                                                              핓
                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gite"
                                                                                                                                                                                                                                                                                                      and analysis
                                                                                                                                                                                      0,
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                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAX78791-X78801 represent nucleic acid sequences which encode novel constructs comprising an E6 or E7 protein or E6/E7 fusion protein from HPV (represented in AAY25375-Y25386). These constructs are optionally linked to an immunological fusion partner and an immunomodulatory CpG oligonucleotide. The products of the invention can be used to induce an immune response in a patient to an HPV antigen. They can also be used for
Bruck C,
                                                                                     04-MAR-1999
                                                                                                                                         Human papillomavirus. Haemophilus influenza
                                                                                                                                                                        Chimeric; E6; E7; fusion protein; protein D; vaccine; immunotherapy; tumour; lesion; benign; malignant; virus; infection; ss.
                                                                                                                                                                                                       Prot.D1/3-E6-E7-His/HPV18 coding sequence
                                                                                                                                                                                                                             17-OCT-2003
22-JUN-1999
                                                                                                                                                                                                                                                             AAX29790;
                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1152 BP; 378 A; 240 C; 240 G; 294 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                               preventing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example XII; Page 60-61; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Composition comprising induce immune response
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1999-405485/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dalemans WLJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-DEC-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
Human papillomavirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HPV antigen; prevention; treatment; ss.
                                          22-AUG-1997;
                                                               17-AUG-1998;
                                                                                                          WO9910375-A2
                                                                                                                               Chimeric.
                                                                                                                                                                                                                                                                                   AAX29790 standard; DNA; 1152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO9933868-A2
                     (SMIK ) SMITHKLINE BEECHAM BIOLOGICALS.
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                                                                                                                                                                                                                                                                                                                                                     TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 32
Cabezon Silva T,
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                                                                                                                                          influenzae.
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(first entry)
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                                          97GB-00017953
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 Delisse AEF,
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Pred. No.
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  Gerard
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RESULT 21
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Best Local 9
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Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fusion protein; va
virucide; uterine
                                                                                                                                                                                                                                                                                                                                                                                                                                          04-MAR-2005.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Fusion protein D1/3-E6-E7-His/HPV18, DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-DEC-2005
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Fig 25; 95pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human Papilloma Virus (HPV) fusion proteins - useful in vaccines for treatment or prophylaxis of HPV induced lesions.
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  The invention relates to human Papilloma virus (HPV) fusion proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Chimeric.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AED52656 standard; DNA; 1152
                                                     Example 17;
                                                                                                                                                         P-PSDB;
                                                                                                                                                                                   WPI; 2005-557648/57
                                                                                                                                                                                                                                      Tyrrell
                                                                                                                                                                                                                                                                                                                                       22-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                       24-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Lombardo-Bencheikh
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                                                                                                                                                                                                                                      AWR;
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                                                                                                                                                           AED52657
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                                                     Fig 25; 96pp; English
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/*tag= .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /product= "Fusion protein D1/3-E6-E7-His/HPV18"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%;
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tumor; E7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                <u>,</u>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 32; DB 2;
Pred. No. 0.00019;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cytostatic; papillomavirus infection; E6; ds; gene; D protein.
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RESULT 22
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25-MAR-2003
10-MAR-2003
19-OCT-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linked to an immunological fusion partner that provides T helper epitopes to the HPV antigen. Vaccine formulations comprising the fusion proteins are useful in the treatment or prophylaxis of HPV induced lesions (papillomas, warts and cervical cancer). HPV 16 (and HPV 18) E6 and E7 proteins (singly, as an B6-E7 fusion or mutated) were fused to either Haemophilus influenzae D protein (20-127), the C-terminus of Streptcococcus pneumoniae Lyth protein (CLyth) or thioredoxin. The present sequence encodes an HPV-H. influenzae D protein, fusion protein of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human
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The expression prods. of HPV18, contained produce antibodies to detect these. HPV16 for antibody prodn. See also AAN80155-59.
                                                                                                                                                                                                                                                                             Schwarz E,
Durst M;
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                                                                                                                                                                                                      WPI; 1988-037095/06.
P-PSDB; AAP82076.
                                                                                                                                                                                                                                                                                                                                                                                           23-JUL-1986;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human
                                                                                                                                   Expression prods. of human papilloma viruses type 16 and 18 the prodn. of diagnostics for HPV16 and HPV18 infections.
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                                                                                                                                                                                                                                                                                                                                            (BEHW ) BEHRINGWERKE AG.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                papilloma virus; HPV16; HPV18; malignant genital tumours;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             papilloma virus 18 protein.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 32
                                                                                          Page
                                                                                                                                                                                                                                                                                                 Oltersdorf T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (revised)
(revised)
(revised)
(first entry)
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                                                                                                                                                                                                                                                                                                                                                                                           86DE-03624786
                                                                                                                                                                                                                                                                                                                                                                                                                                         86DE-03625257.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /*tag=
/label=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                          ?; 7pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                *tag= a
label= HPV18 E6 protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 label= HPV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA; 1731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .729
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                                                                                             German.
                                                                                                                                                                                                                                                                                                   Rowekamp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 32;
Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            protein
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                                                                                                                                                                                                                                                                                                   Schneiderg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 14;
in this sequence, are used to expression prods are also used (Updated on 10-MAR-2003 to add
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        665
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
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                                                                                                                                                                used
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RESULT 23
ADZ45648
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                                                        Query Match
Best Local S
Matches 32
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Best Local Similarity
Matches 32; Conserv
                                                                                                                                        The invention comprises a composition for the detection of cancer markers, the composition contains a nucleic acid molecule which is substantially identical to a full length genomic clone of a human papilloma virus (type 11, 16, 18, 51, 56, 58, 66, 70, or 73). The composition of the invention is useful for diagnosing cancer or the risk of developing cancer, in particular cervical, anal, colon and HPV-related cancer. The present DNA sequence represents a human papilloma virus full length genomic clone of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 1731 BP; 610 A; 313 C; 403 G; 405 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             missing OS field.) (Updated on 25-MAR-2003 to correct PR field.) (Updated on 25-MAR-2003 to correct PI field.) (Updated on 27-AUG-2003 to correct OS field.)
                                                                                                                                                                                                                                                                            Claim 1; SEQ ID NO 2; 169pp; English.
                                                                                                                                                                                                                                                                                                                   New composition having a nucleic acid molecule identical to genomic clone of human papilloma virus 16, 18 or 51, useful in diagnosing cancer or the risk of developing cancer, in particular cervical, anal, colon and HPV-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-OCT-2003; 2003DK-00001474.
07-OCT-2003; 2003US-0509205P.
13-FEB-2004; 2004US-0543925P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human papillomavirus type 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tumor marker; genome; diagnosis; cancer; uterine cervix tumor;
rectal tumor; colon tumor; ds.
                                                                                                                Sequence 7857 BP; 2365 A; 1497 C; 1680 G; 2315 T;
                                                                                                                                                                                                                                                                                                                                                                                                                          Chau MF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          04-OCT-2004; 2004WO-DK000670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14-APR-2005
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADZ45648 standard; DNA; 7857 BP
                                                                                                                                                                                                                                                                                                          related cancer.
                                                                                                                                                                                                                                                                                                                                                                                                           Lindberg M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                     (DAKO-) DAKOCYTOMATION DENMARK AS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                399 TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 430
 405
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        32;
                                                         32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 32
                                                                       Similarity
 TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 436
                            TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 32
                                                                                                                                                                                                                                                                                                                                                                                                                        Bisgaard-Franzen K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                            Yoast S;
                                                                     100.0%;
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Pred. No.
                                                      Score 32; DB 14;
Pred. No. 0.00029;
; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                          Rasmussen OF,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      genomic clone -
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                                                                                 Length 7857;
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                                                                                                                0 U; 0 Other;
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Matches 31
                                                                                                                                                  The present sequence encodes an E6 polypeptides from human papillomavirus type 45 (HPV45). The specification describes human papillomavirus E6 and E7 polypeptides, where the E7 polypeptide has mutations at any one or more of the amino acids corresponding to amino acids 24, 26 or 91 of the sequence given in ADO44073 and the E6 polypeptide has no mutations or has mutations at any one or more of the amino acids corresponding to amino acids corresponding to amino acids 30 or 106 of there sequence given in ADO44072. The polypeptides of the invention are useful for treating or preventing human papillomavirus (HPV) -associated cancers, such as cervical cancer. The fusion proteins and nucleic acids encoding the fusion proteins are useful for generating immune responses against HPV. They are also useful for treating lower gastrointestinal tract cancers, e.g. anal cancer, and other cancers of the reproductive system, including penile and vulvar cancer.
                                                                                                                                                                                                                                                                                                                                                                                                              New polypeptide comprising human papillomavirus E6 and E7 polypeptides, useful for treating or preventing human papillomavirus (HPV)-associated cancers, e.g. cervical cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  E6 protein; E7 protein; fusion protein; HPV45; HPV-associated cancer; cervical cancer; immune response; lower gastrointestinal tract cancer; anal cancer; reproductive system cancer; penile cancer; vulvar cancer;
                                                                                                                         Sequence 477 BP; 171 A; 86 C; 101 G; 119 T; 0 U;
                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 96; 101pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                P-PSDB; ADO44079.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Smith
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           03-OCT-2002; 2002US-0415929P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          02-OCT-2003; 2003WO-US031726.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nucleotide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (AMHP ) WYETH HOLDINGS CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2004-316328/29.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     papillomavirus type 45
                             1 TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 32
                                                                            Similarity
 TTGTTAATAAGGTGCCTGCGGTGCCAGAAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cassetti MC/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /*tag= a
/product= "E6 polypepyide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                          95.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   of the E6
                                                             0,
                                                                          Score 30.4;
Pred. No. 0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                polypeptide of HPV45
                                                                            00089
 332
                                                                                            DB 12;
                                                                                                                            0 Other;
                                                                                         Length 477;
                                                               Indels
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ADO44105 ID ADO4 XX

ADO44105

standard; DNA; 477

RESULT

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RESULT 26
ADO44112
ID ADO44
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AC ADO44
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DT 15-JU
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                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present sequence encodes an 86 polypeptides from human papillomavirus type 39 (HPV99). The specification describes human papillomavirus E6 and E7 polypeptides, where the E7 polypeptide has mutations at any one or more of the amino acids corresponding to amino acids 24, 26 or 91 of the sequence given in ADO44073 and the 86 polypeptide has no mutations or has mutations at any one or more of the amino acids corresponding to amino acids corresponding to amino acids corresponding to amino acids corresponding to amino acids corresponding to amino acids corresponding to amino acids corresponding to amino acids corresponding to amino acids corresponding to amino acids corresponding to amino acids corresponding to amino acids corresponding to amino acids corresponding to amino acids corresponding to amino acids corresponding to amino acids corresponding to acids cor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New polypeptide comprising human papillomavirus E6 and E7 polypeptides, useful for treating or preventing human papillomavirus (HPV)-associated cancers, e.g. cervical cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     E6 protein; E7 protein; fusion protein; HPV39; HPV-associated cancer; cervical cancer; immune response; lower gastrointestinal tract cancer; anal cancer; reproductive system cancer; penile cancer; vulvar cancer;
  Nucleotide sequence of the E6 polypeptide of HPV68.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 477 BP; 170 A; 96 C; 100 G; 111 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 95-96; 101pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-316328/29.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-OCT-2002; 2002US-0415929P
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                                                    15-JUL-2004
                                                                                                      AD044112
                                                                                                                                                      ADO44112 standard; DNA; 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                P-PSDB; ADO44078.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WYETH HOLDINGS CORP.
                                                                                                                                                                                                                                                                                                                                                                                                      n 75.0%;
Similarity 84.4%;
                                                                                                                                                                                                                                                                                                                               TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cassetti MC;
                                                                                                                                                                                                                                                                             TTATTAATAAGGTGCATGTGTTGTCTGAAACC 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sequence of the E6 polypeptide of HPV39
                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                  (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
1. .477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             tract cancers, e.g. anal cancer, and other system, including penile and vulvar cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /product= "E6 polypepyide"
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                                                                                                                                                                                                                                                                                                                                                                                                    Score 24; DB 12;
Pred. No. 0.84;
                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                              Length 477;
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RESULT 27
AAZ31781
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Best Local Similarity
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                                                                                            HPV68; human papillomavirus 68; detection; immunisation; infection; ss.
                                                                                                                                                                                             HPV68 DNA
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Human papillomavirus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     reproductive system, including penile and vulvar cancer.
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Pred. No. 0.84;
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RESULT 28
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New human papillomavirus (HPV) treatment of HPV infections.
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New human papillomavirus (HE treatment of HPV infections.
                                                                                                                                                                                                                                                                                                              11-FEB-1997;
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15-FEB-1996;
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15-FEB-1996;
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                                                                                                                    Longuet M,
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protein; E7 protein: ee
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                                                                                                                                                                 INST PASTEUR.
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96US-0020458P.
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96US-0020458P.
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                        70 DNA sequences,
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Query Match
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                                                                                                                                                                                      This sequence represents a human papillomavirus (HPV) 70 DNA sequence. The invention relates to a purified HPV68 DNA (I) deposited at C.N.C.M. (Collection Nationale de Culture de Microorganisms) under Accession No. -1540, and a HPV70 DNA (II) sequence. Fragments of the HPV68 and HPV70 DNA may be useful as primers or probes in the detection of HPV68 or HPV7 infections. Proteins produced by the HPV DNA's can be used to immunise
                                                                                                           Sequence 3283 BP; 945 A; 640 C; 699 G; 999 T; 0 U; 0 Other;
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15-FEB-1996;
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18-JAN-1993
DNA was isolated from a previously identified HPV39 clone (Virology 374-384, 1987), subcloned and sequenced. The HPV39 genome was found comprise 7833bp and have a G/C content of 40%. The genome comprises reading frames conserved among all the known HPV's; the ORFs are postulated to code for the early proteins and capsid components of t
                                                                                                                                                                                                    DNA sequences of the HPV39 Papilloma:virus genome - in=vitro diagnosis of Papilloma:virus infections in
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                                                                                The invention comprises a composition for the detection of cancer markers, the composition contains a nucleic acid molecule which is substantially identical to a full length genomic clone of a human papilloma virus (type 11, 16, 18, 51, 56, 58, 66, 70, or 73). The composition of the invention is useful for diagnosing cancer or the risk of developing cancer, in particular cervical, anal, colon and HPV-related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-OCT-2003; 2003DK-00001474.
07-OCT-2003; 2003US-0509205P.
13-FEB-2004; 2004US-0543925P.
                                                                                                                                                                                                                                                                                                                                                     New composition having a nucleic acid molecule identical to genomic clone of human papilloma virus 16, 18 or 51, useful in diagnosing cancer or the risk of developing cancer, in particular cervical, anal, colon and HPV-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2005-285441/29
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                                                                                                                                                                                                                                                                                Claim 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lindberg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chau MF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human papillomavirus type 70
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                                                                                                                                                                                                                                                                                                                                    related
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M, Yoast S;
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colon tumor; ds.
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                                                                                                                                                                                                                                                                             NO 9; 169pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      type
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84.4%;
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Pred. No. 1.5;
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composition.

of developing cancer, in partituding cancer. The present DNA sequence represents a cancer. The present of the invention.

human papilloma virus

full

SS

Sequence 7905 BP;

2425 A; 1495 C; 1693 G; 2292 T; 0 U; 0 Other;

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RESULT 32
ACC46617
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Best Local S
Matches 27
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29-MAR-2001; 2001US-0280067P.
29-MAR-2001; 2001US-0280068P.
16-MAY-2001; 2001US-0291280P.
17-MAY-2001; 2001US-0291829P.
17-MAY-2001; 2001US-0291849P.
19-UN-2001; 2001US-0299428P.
20-UUN-2001; 2001US-0299428P.
                                                                                                                                                                                                                                                                 Dufour GE, Hillman JL, Yu JY, Tuason O, Yap PE, Amshey SR; Daughtery SC, Dam TC, Liu TF, Nguyen DA, Kleefeld Y, Gerst: Peralta CH, David MH, Lewis SA, Chen AJ, Panzer SR, Harris Flores V, Marwaha R, Lo A, Lan RY, Urashka MF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cancer; cell proliferative disorder; autoimmune disorder; inflammatory disorder; infection; hormonal disorder; metabolic disorder; neurological disorder; gastrointestinal disorder; transport disorder; connective tissue disorder; drug screening; proteome analysis; gene therapy; antisense therapy; genotyping; transgenic animal; knock in; disease model; toxicological testing; transcript imaging;
              The invention relates to novel human diagnostic and therapeutic polynucleotides designated dithp (ACC46080-ACC46749) and to their encode protesins (DITHP, ABR41136-ABR41812). The invention also relates to polynucleotide sequences at least 90% identical to the dithp cDNA sequences of the invention, recombinant vectors, host cells and transgenic organisms comprising a dithp nucleic acid sequence; the recombinant production of DITHP proteins; antibodies specific for DITHP
                                                                                                                                                                Novel human diagnostic and therapeutic polypeptide useful for identifying test compound which specifically binds to a polypeptide encoded by human diagnostic and therapeutic polynucleotide, and to induce antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human dithp ribosomal protein-encoding cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACC46617
                                                                                                                                       Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-DEC-2002.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; dithp; diagnostic and therapeutic polynucleotide; diagnosis;
 proteins; microarrays
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-MAR-2002; 2002WO-US010056.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ribosomal protein;
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                                                                                                                                                                                                                                                                                                                                                                       INCYTE GENOMICS INC.
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                                                                                                                                       SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            standard;
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                                                                                                                                     NO 538; 591pp;
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 comprising
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Pred. No. 1
                                                                                                                                       English.
dithp nucleic acid
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sequences; methods of
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RESULT 33
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Best Local (
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02-NOV-2000;
11-MAY-2001;
15-MAY-2001;
22-MAY-2001;
                                                                                                                                                                                                                                                                                        13-JUN-2001;
19-JUN-2001;
09-JUL-2001;
                                                                                                 WPI; 2002-241625/29.
                                                                                                                                                                                                                                                                                                                                                                                             06-JUN-2001;
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25; Conserv
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; 2001US-0290029P.

; 2001US-0290645P.

; 2001US-0292336P.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    expressed sequence tag; EST; drug screening;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         centrilobular necrosis; steatosis
                                                                                                                                                                  Johnson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 23.8; DB Pred. No. 1.1; 0; Mismatches
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Predicting teffects by

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RESULT 34
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local 9
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                                                                                                                                                                                                                                                                                                                                                                                      Toxicology screening; drug screening; cardiotoxicity, drug-induced; expression profile; gene expression; myocarditis; heart arrhythmia; tachycardia; myocardial ischemia; angina; hypertension; hypotension
                         08-JAN-2003; 2003US-00338044
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                                                                                                                                                                                                                                                                                                                                                             cardiogenic shock; cardiovascular
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                                                                                                                                                                                                                                                                                                                                tag; 88.
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RESULT 35
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Humar
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PN WO200

04-DEC-2001

(first

entry)

AAS31153

standard; cDNA; 885

Human; receptor; diagnostic; therapeutic; gene therapy; vaccine; cell proliferative disorder; Crohn's disease; lymphoma; leukaemi acquired immune deficiency syndrome; AIDS; autoimmune disorder;

WO200162927-A2 Homo sapiens. respiratory disorder;

Human diagnostic and therapeutic polynucleotide (DITHP) #168.

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AATAAGGTGCCTGCGGTGCCAGAAACC 32

Matches

Conservative

<u>,</u>

<u>ب</u>

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Gaps

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Local

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CC dysphas, cardiogenic shock or other specific heart pathologies. The CC invention is based on the elucidation of global changes in gene CC expression in tissues or cells exposed to known toxins, particularly CC cardiotoxins, and the identification of individual genes (toxicity CC markers) that are differentially expressed on toxin exposure. The CC invention also relates to methods for predicting the progression of a CC compound's toxic effects, for predicting the cardiotoxicity of a CC compound, for identifying an agent that modulates the onset or CC pathways a particular compound will modulate. The invention further CC relates to sets of at least two hybridization probes specific for CC compounds such as pharmaceutical supports and kits comprising them. CC relates to sets of at least two hybridization probes specific for CC predicting the toxic effects (especially cardiotoxic effects) of CC compounds such as pharmaceutical agents or environmental pollutants. CC sequences ADV9313-ADV41830 represent cardiotoxic effects) of CC sequences ADV9313-ADV41830 represent cardiotoxic three on exposure to at least one cardiotoxin. Note: The sequence data for this patent did not form part directly from MIDD at fire introduction is altered on exposure to form part directly from MIDD at fire introduction obtained in electronic CC forms directly from MIDD at fire introduction but was obtained in electronic CC form at directly from MIDD at fire introduction.
                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to a method of predicting at least one toxic effect of a compound by obtaining a gene expression profile of a tissue or cell sample exposed to the compound and comparing the gene expression profile to a database of toxicity prediction genes which are differentially expressed on exposure to known toxins. The tissue or cell sample is preferably derived from heart tissue, and the predicted toxic effect is especially a cardiotoxic effect such as myocarditis, arrhythmias, tachycardia, myocardial ischemia, angina, hypertension, hypotension, dyspnea, cardiogenic shock or other specific heart pathologies. The invention is based on the allocation of the prediction of the comparison of the com
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mendrick
Elashoff
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                                      74.4%;
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30-AUG-2001

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The invention relates to polynucleotides (I) encoding diagnostic and therapeutic (DITHP) polypeptides (II), which include e.g. enzymes, and CC proteins involved in growth and development and receptors. (I) and (II) cmay be used in the prevention, diagnosis and treatment of diseases CC associated with inappropriate DITHP expression. For example, (I) and (II) may be used to treat disorders associated with decreased polypeptide conversion by rectifying mutations or deletions in a patient's genome, that affect the activity of the DITHPs, by expressing inactive proteins convergence or supplementing the patient's own production of them. (I) and (II) may be used to treat diseases, for example, cell proliferative disorder, CC crohn's disease, acquired immune deficiency syndrome (AIDS), lymphoma, convergence and convergence as and respiratory disorders. Additionally, cell may be used to produce the DITHPs, by inserting the nucleic acids in the complementary sequences may also be used as DNA probes in diagnostic casesys to detect and quantitate the presence of similar nucleic acids in the charactery and therefore which patients may be in need of restorative convergence.
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Chen A
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iJ, Hodgson DM,
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'8a SA, Amshey S, Dahl CR, Dam TC, Daniel

'Pong WT, Greenawalt LB, Hillman JL, Jones

PAM, Rosen BH, Russo FD, Stockdreher TK, I

Yap PE, Yu JY, Bradley DL, Bratcher SR,

Hodgson DM, Lincoln SE, Jackson S;
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2000US-0184776P.
2000US-0184777P.
2000US-0184797P.
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2000US-0205324P
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may also
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C, Daniels
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TK, Daffo A;
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Liu
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       antibodies against DITHPs and in assays to identify modulators of DITHP expression and activity. The anti-DITHP antibodies and antagonists may also be used to down regulate expression and activity. The anti-DITHP antibodies may also be used as diagnostic agents for detecting the presence of DITHPs in samples (e.g. by enzyme linked immunosorbant assay (BITAN)). AAS30986-AAS31196 represent human diagnostic and therapeutic
                                                                                                    AAT71194-T71199 are probes used for the detection of spliced exons human papillomavirus (HPV) types 16, 18, 31, 33 and 35. The probes specifically hybridise to E6 region exons at the splice junction of spliced HPV genome. The probes are used for accurate and reliable prognosis of HPV-induced cancers, in particular cervical cancer. (to on 25-MAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                               Human probe;
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AAT71196 standard; DNA; 40
                                                                                 Sequence
                                                                                                                                                                           Example 1; Fig 4; 18pp; English
                                                                                                                                                                                                  cervical neoplasias
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05-DEC-1990;
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20-AUG-1997
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                                                                                                                                                                                                                                  1997-033604/03.
                                                                                                                                                                                                                                                                                                                                                                                                               papillomavirus; HPV; cervical cancer;
; detection; diagnosis; hybridisation;
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                 TTAATAAGGTGCCTGCGGTGCCAGAAAC 31
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                                         Conservative
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(first entry)
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90US-00622742.
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89.3%;
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Pred.
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No. 1
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RESULT 37
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Matches 23; Conserv
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02-DEC-1993
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAQ44290 standard; DNA; 30
                             US5962218-A
                                                                                   Synthetic.
                                                                                                                                                                      Binding assay;
                                                                                                                                                                                                                           Oligo 2PV18 directed to HPV E6 region.
                                                                                                                                                                                                                                                                                                                                                                                               AAZ07822 standard; DNA; 30 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO9312245-A1
                                                                                                                                        PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (IGEN-) IGEN INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ۳
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTATTAATAAGGTGCCTGCGGTG 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTATTAATAAGGTGCCTGCGGTG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Link JR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     primer 2PV18 5' (C6, NH2) the E6 region (19).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            91US-00804951
                                                                                                                                                                         electrochemiluminescence; luminescence; HPV; E6 region;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    92WO-US010524.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      71.9%; bred. No. 100.0%; Pred. No. 100.0%; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 23; DB 2
Pred. No. 1.4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   for human papilloma virus (HPV)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 30;
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RESULT 39
ADZ64772/c
ID ADZ64772;
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AC ADZ64772;
XY
DT 30-JUN-200
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DE HPV 18 E6
XX
DE HPV 18 E6
XX
DE HPW 18 E6
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DE HWman papi
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SHuman papi
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FT modified_1
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FT modified_1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention provides a binding assay based on measuring CC electrochemiluminescence from a luminescent component concentrated in an electrochemiluminescence from a luminescence for detection. The CC assay composition which is collected at an electrode for detection. The CC inding assay is used to measure luminescence emitted by one or more CC labeled components of the assay system. The assay can be used to measure CC e.g. antigen-antibody, ligand-receptor, RNA and DNA interactions. The CC e.g. antigen and the analyte of interest may be e.g. a whole cell, where CC sample may be derived from cells, water, feces, saliva, tissue, hair, CC sweat or urine and the analyte of interest may be e.g. a whole cell, Burface antigen, subcellular particle, virus, antibody, antigen, hapten, CC surface antigen, burmone, nucleic acid, vitamin, amino acid, sugar, CC polysaccharide, hormone, nucleic acid, vitamin, amino acid, sugar, CC molecule. The assay has improved sensitivity, faster assay time, greater specificity, lower detection limits and greater precision than previous methods. Sequences AAZO7818-823 represent PCR oligos directed to the HPV CC E6 region, used during the course of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-JUN-1990;
06-FEB-1991;
03-FEB-1992;
12-JUL-1993;
24-NOV-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 30 BP; 10 A; 7 C; 4 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Binding assay based on detection of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1999-579609/49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Shah HP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24-NOV-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05-OCT-1999
                                           modified_base
                                                                                                                                                                                                Analyte detection; luminescence; PCR;
                                                                                                                                                                                                                              HPV 18 E6 region specific PCR primer,
                                                                                                                                                                                                                                                              30-JUN-2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 20; Col 30; 43pp; English.
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                                                                                                                                                                     Human papillomavirus
                                                                                                                   modified_base
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                     23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                23;
                                                                                                                                                                                                                                                                                                                                                                                                                          TTATTAATAAGGTGCCTGCGGTG 23
                                                                                                                                                                                                                                                                                                                          standard; DNA; 30 BP
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Leland JK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                              (first entry)
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93US-00090467.
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90US-00539389
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                                                                            /mod_base=
/note= "Lin
 /*tag= b
/mod_base= OTHER
/note= "Linked to a three carbon spacer"
                                                                                                                                      Location/Qualifiers
                                                                                                           *tag=
                                                                                                                                                                     type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%;
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                                                                            "Linked
                                                                            OTHER nked to
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Pred. No
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                                                                            six carbon
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                                                                                                                                                                                                   primer;
                                                                                                                                                                                                                                   2PV18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.4;
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                                                                            spacer
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                                                                            designated
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RESULT 40
ABV07997
ID ABV077
XX ABV07
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XX Human
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XX Pharm
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Best Local S
Matches 23
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24-NOV-1993;
30-NOV-1994;
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03-NOV-1988;
21-JUL-1989;
17-FEB-2000; 2000US-0183319P.
16-MAR-2000; 2000US-0189862P.
25-MAY-2000; 2000US-0207454P.
                                                                                                                                                Human; prostate pharmacogenomic
                                                                                                                                                                                   Human
                                                                                                                                                                                                                                                                                                                                                                                                                                               composition suitable for use in electrochemiluminescent assay for analyte of interest which comprises electrochemiluminescent label binding reagents, collectable magnetic particles particles electrolyte. The present sequence is the human papillomavirus (HPV) B6 region specific PCR primer. This sequence was used in a binding assay for an analyte of interest present in a sample based upon electrochemiluminescence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Electrochemiluminescent composition useful in assay for analyte e.g., virus, comprises electrochemiluminescent label, first and second binding reagents having binding partners of analyte, collectable magnetic particles and electrolyte.
                                                                                                                                                                                                             13-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19-APR-2005
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                                               20-FEB-2001; 2001WO-US005171
                                                                                                WO200160860-A2
                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                     ABV07997;
                                                                                                                                                                                                                                                             ABV07997 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 30 BP; 10 A; 7 C; 4 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example
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                                                                                                                                                                                    prostate expression marker cDNA
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                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                      TTATTAATAAGGTGCCTGCGGTG
                                                                                                                                                                                                                                                                                                                          TTATTAATAAGGTGCCTGCGGTG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Shah HP,
                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           invention relates to an electrochemiluminescent (ECL)
                                                                                                                                                                                                             (first
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91US-00652427.
93US-00158193.
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96US-00858354
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89US-00369560.
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                                                                                                                                               marker; cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORP.
                                                                                                                                                                                                                                                              CDNA;
                                                                                                                                                                                                             entry
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Pred. No.
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                                                                                                                                                            carcinogen;
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1.4;
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                                                                                                                                                            pharmacodyanamic
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                                                                                                                                                            marker;
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RESULT 41
ACH99313/G
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a patient is afflicted with prostate cancer; (b) monitoring the progression of prostate cancer in a patient; (c) assessing the efficacy of a test compound to inhibit prostate cancer in a patient; (d) assessing the efficacy of a therapy for inhibiting prostate cancer in a patient; (e) selecting a composition for inhibiting prostate cancer in a patient; (f) assessing the prostate cell carcinogenic potential of a compound; (g) determining whether prostate cell carcinogenic potential of a patient; (h) assessing the aggressiveness or indolence of prostate cancer in a patient; (l) is also useful as a pharmacodyanamic or pharmacogenomic marker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to an isolated nucleic acid molecule (I) comprising a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the specification or its complement. (I) is useful for: (a) assessing whether
New human genome-derived single exon nucleic gene expression analysis, for identifying or
                                                                                                                                                                                                                                                                                                                                                                 03-APR-2002; 2002US-00029386
                                                                                                                                                                                                                                                                                                                                                                                                                        16-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; probe; ss; ger alternative splicing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29-JUL-2004
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18-JUL-2000; 2000US-0219007P.
13-DEC-2000; 2000US-0255281P.
                                                                                      WPI; 2004-119264/12.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2003194704-A1
                                                                                                                                                                                             (PENN/) PENN S G.
(RANK/) RANK D R.
(HANZ/) HANZEL D K.
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                                                                                                                                         SG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   genome derived single exon probe #22508.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 88
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          standard; DNA; 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      167 BP; 48 A; 33 C; 48 G;
                                                                                                                                         Rank DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
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ing event; genomic
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83.3%;
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Pred. No. 3
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c alteration.
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  acid probes useful for human characterizing alternative
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XX DNA e
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cc gene expression (comprising a plurality of single exon nucleic acid comprobes cited above, where each of the plurality of probes is separately cc and addressably isolatable or amplifiable from the plurality), a single exon microarray for measuring human gene expression, a method of cc exon microarray for measuring human gene expression, a vector comprising the single exon probe cited above, an ORF-encoded peptide comprising at least gc contiguous amino acids of any of the above-mentioned amino acid sequences (optionally with conservative amino acid substitutions), an cc isolated antibody that binds specifically to a peptide cited above, comethods of selling and/or licensing single exon probes or microarrays to a customer desiring to measure gene expression, a method of providing human gene expression data by subscription, and a computer-readable storage medium which contains a database having a plurality of records (each record including data on the expression of a single exon probe cited above. The probes may be used as tools for surveying to spression analysis. The probes may be used as tools for surveying to spression analysis. The probes may be used as tools for surveying to spression, or in constructing genome-derived single exon microarrays. In addition, the probes are used in identifying and characterising alternations in the genomic locus that includes their exon, in assessing smaller genomic alterations, in priming the synthesis of nucleic acids, or in expressing the ORF-encoded peptide. The present sequence is a human cc single exon probe of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from USFO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sequences in the specification, or their complements or fragments, and encoding at least 8 amino acids of any of the 6888 amino acid sequences fully defined in the specification. The probe is a single exon probe that hybridises under high stringency conditions to a nucleic acid molecule
                   30-MAR-2001; 2001WO-US008631
                                                                                                                                                                                                       Human; chromosome mapping; gene mapping; gene therapy; forensic; food supplement; medical imaging; diagnostic; genetic disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                     AAS78228;
                                                                                                                                                                                                                                                                                                                                                                                                                AAS78228 standard; cDNA; 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 159 BP; 30 A; 40 C; 26 G; 63 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               expressed in human cells or tissues. Also included are a spatially-
addressable set of single exon nucleic acid probes for measuring human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to a nucleic acid probe for measuring human expression, comprising any of the 27,400 fully defined nucleotide
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                                                                     11-OCT-2001.
                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                          DNA encoding novel human diagnostic protein #14032.
                                                                                                                                                                                                                                                                                                                          13-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                seqdata.uspto.gov/sequence.html?DocID=20030194704
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                                                                                                                WO200175067-A2
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Pred. No. 4.
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RESULT 43
ABX40477
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AC ABX41
AC ABX41
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DT 20-F
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to isolated polynucleotide (I) and polypeptide (II)

Sequences. (I) is useful as hybridisation probes, polymerase chain

CC reaction (PCR) primers, oligomers, and for chromosome and gene mapping,

CC and in recombinant production of (II). The polynucleotides are also used

CC in diagnostics as expressed sequence tags for identifying expressed

CC genes. (I) is useful in gene therapy techniques to restore normal

CC activity of (II) or to treat disease states involving (II). (II) is

CC useful for generating antibodies against it, detecting or quantitating a

CC polypeptide in tissue, as molecular weight markers and as a food

CC supplement. (II) and its binding partners are useful in medical imaging

CC involving aberrant protein expression or biological activity. The

CC involving aberrant protein expression or biological activity. The

CC olignostics forensics, gene mapping, identification of mutations

CC diagnostics forensics, gene mapping, identification of mutations

CC end to produce other types of data and products dependent on DNA and

CC and to produce other types of data and products dependent on DNA and

CC and in oacid sequences. AAS64197-AAS94564 represent novel human diagnostic

CC coding sequences of the invention. Note: The sequence data for this

CC patent did not appear in the printed specification, but was obtained in

CC electronic format directly from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local
                                                                                                                                                                                                    Bovine; ss; EST; expressed sequence tag; lactation; LMFD; muscle deposition; fat deposition; genome mapping; gene i gene analysis; cattle breeding.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 297 BP; 98 A; 57 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess
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23-AUG-2000; 2000US-00649167.
        12-JAN-1999;
                                                                                                                                                                Bos Taurus
                                                                                                                                                                                                                                                                                   Bovine EST associated with lactation/muscle/fat deposition
                                                                                                                                                                                                                                                                                                                           20-FEB-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; SEQ ID NO 14032; 103pp; English.
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                                           24-SEP-2001; 2001US-00960352.
                                                                                                                           US2002137139-A1.
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        99US-0115707P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            69.4%;
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Pred. No. 5.2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CC (1) a transformed cell having a nucleic acid comprising an LMFD nucleic confidence that confidence in the cell to cause termination of transcription and addition of functions in the cell to cause termination of transcription and addition confidence that confidence in the cell to cause termination of transcription and addition of polyadenylated ribonucleotides to a 3' end of the mRNA molecule; and confidence comprising a level or pattern of a molecule in a bovine cell or confidence comprising; (a) incubating a marker nucleic acid (comprising any confidence confidence or its complement or fragment) with a complementary nucleic acid molecule obtained from the bovine cell or complementary nucleic acid molecule obtained from the bovine cell or complementary nucleic acid molecule, where nucleic acid and the complementary nucleic acid, where complementary nucleic acid is predictive of the complementary nucleic acid is gredictive of the complementary nucleic acid is used for confidence or pattern of a molecule in a bovine cell or tissue. Confidence in a spring, gene identification and analysis, cattle breating, preparation of constructs for use in cattle gene expression, or constructs for use in cattle gene expression, or constructs for use in cattle gene expression, or constructs for use in cattle gene expression, or constructs for use in cattle gene expression.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 2; SEQ ID NO 5642; 245pp; English.
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                                                                                                                                                                                                            cervical cancer;
                                                                                                                                                                                                                                                                                                         Probe #62 for gene expression analysis in human cervical cell sample.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           present sequence was not shown in the specification but was obtained in electronic format from the USPTO web site:
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(MATH/) MATHIALAGAN N.
(TAON/) TAO N.
                                                                       WO200157278-A2
                                                                                                                                                                                                                                        Probe; human; microarray; gene
                                                                                                                                                                                                                                                                                                                                                                                    12-OCT-2001
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ilarity 88.9%;
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Pred. No. 5
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                        04-FBB-2000; 2000US-0180312P.
26-MAY-2000; 2000US-0008408.
30-JUN-2000; 2000US-0068408.
03-AUG-2000; 2000US-00632366.
21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-0234589P.
04-OCT-2000; 2000GB-00024263.
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26-MAY-2000;
30-JUN-2000;
03-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to human single exon nucleic acid probes (SENP). The present sequence is one such probe. The SENPs are derived from human HeLa cells. The SENPs can be used to produce a single exon microarray, which can be used for measuring human gene expression in a sample derived from human cervical epithelial cells. By measuring gene expression, the probes are therefore useful in grading and/or staging of diseases of the cervix, notably cervical cancer. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at
                                                                                                                                30-JAN-2001; 2001WO-US000669
                                                                                                                                                            09-AUG-2001.
                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                        Human;
                                                                                                                                                                                                                                                                  Human foetal liver single exon nucleic acid probe #64
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MOLECULAR DYNAMICS
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2000US-207456P.
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; 2000US-00632366.
; 2000US-0234687P.
; 2000US-0236359P.
; 2000US-00024263.
invention relates to single exon nucleic acid probes (SENP) sequence is one such probe. The probes are useful for microarray for predicting, measuring and displaying gene
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Pred. No. 5.7;
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26-MAY-2000;
30-JUN-2000;
03-AUG-2000;
                                           The present invention relates to single exon nucleic acid probes for measuring human gene expression in a sample derived from human heart. The present sequence is one such probe. The probes may be used for predicting, measuring and displaying gene expression in samples derived from the human heart via microarrays. By measuring gene expression, the probes are useful for predicting, diagnosing, grading, staging, monitoring and prognosing diseases of the human heart and vascular system e.g. cardiovascular disease, hypertension, cardiac arrhythmias and congenital heart disease, Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; gene expression; heart; microarray; vascular system; probe; cardiovascular disease; hypertension; cardiac arrhythmia; congenital heart disease; ss.
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27-SEP-2000;
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                                                                                                                                                                                                                                                                                                                                                                    Claim 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                exon nucleic acid probes
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  98 T; 0 U;
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Query Match Best Local S

Local Similarity

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Score 22.2; Pred. No. 5.

DB 4;

Length 460;

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                                                                                                                                                                                      Query Match
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Matches 24
                                                                                                                                                                                                                                                                     probes which are derived from genomic sequences expressed in the human bone marrow. They can be used to measure gene expression in bone marrow samples, which may enable the improved diagnosis and treatment of cancers such as lymphoma, leukaemia and myeloma. The present sequence is one of
                                                                                                                                                                                                                                                                                                                                                                                                                           Penn
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26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; bone marrow expressed exon; gene expression analysis; probe; microarray; cancer; leukaemia; lymphoma; myeloma; ss.
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            Human brain expressed single exon probe SEQ ID NO:
                                    05-NOV-2001
                                                           AAK00066;
                                                                                AAK00066 standard;
                                                                                                                                                                                                                                   Sequence 460 BP; 163 A; 87 C; 112 G; 98 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                          such as lymphoma, leukaemia
the probes of the invention
                                                                                                                                                                                                                                                                                                                   The present invention provides a number of single exon nucleic
                                                                                                                                                                                                                                                                                                                                         Example 4; SEQ ID NO 62; 658pp + Sequence Listing; English
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                                                                                                                                                                                                                                                                                                                                                                  expression in human
                                                                                                                                                                                                                                                                                                                                                                genome-derived single exon nucleic acid probes useful for analyzing expression in human bone marrow.
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                                                                                                                                         AAGAAGGTTCCTGCTGCCAGAAACC 64
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2000US-0207456P.
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                                                                                 DNA; 460
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Best Local :
                                                                                                                                                                                                                                                             Human; single exon nucleic acid probe; liver; cirrhosis; hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia; coronary heart disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         probes which are derived from genomic sequences expressed in the human brain. They can be used to measure gene expression in brain cell samples, which may enable the diagnosis and improved treatment of nervous system diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia,
  04-FEB-2000; 2000US-0180312P
                                                   30-JAN-2001; 2001WO-US000664.
                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                      25-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABS25073 standard; DNA; 460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    epilepsy and cancers. The present sequence is one of the probes of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention provides a number of single exon nucleic probes which are derived from genomic sequences expressed in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 4; SEQ ID NO 57; 650pp + Sequence Listing; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Single exon nucleic acid probes for analyzing gene expression in human
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27-SEP-2000;
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03-AUG-2000;
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                                                                                                          09-AUG-2001
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; 2000US-0060B408.
2000US-00632366.
; 2000US-023466TP.
; 2000US-0236359P.
; 2000GB-00024263.
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Search completed: May 24, 2006, 05:55:19 Job time: 382.899 secs
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                                                                                                                                                                                                                               The invention relates to a single exon nucleic acid probe (SENP) (I) for measuring human gene expression in a sample derived from human adult liver, comprising one of 13109 defined nucleotide sequences given in the specification (or complements) fragments). The probe hybridises at high stringency to a nucleic acid molecule expressed in the human adult liver. (I) may be used for predicting, measuring and displaying gene expression in samples derived from human adult liver. The genes identified may be involved in genetic liver diseases such as cirrhosis, hyperlipoproteinaemia, hyperlipidaemia and hypercholesterolaemia which is associated with coronary heart disease. ABS25011-ABS51005 represent human liver single exon nucleic acid probes of the invention. Note: The sequence information for this patent does not appear in the printed specification but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
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30-JUN-2000; 2000US-00608408.
03-AUG-2000; 2000US-00532366.
21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-023359P.
04-OCT-2000; 2000GB-00024263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human genome-derived single exon nucleic acid probes useful for analyzing gene expression in human adult liver.
                                                                                                                                                                                                                             Sequence 460 BP; 163 A; 87 C; 112 G; 98 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; SEQ ID NO 63; 658pp; English.
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Pred. No. 5.
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Match
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DW414483 HHAGE0152
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B1260198 602996552
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Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                               Henan Bioengineering Key Lab
Henan Normal University
No. 148 Jianshe Road, Xinxiang City, P.R.China
                                                                                                                     Liver regeneration after Unpublished (2003)
                                                                                                                                                                                          sapiens cDNA, mRNA sequence.
DW414483
                                                                                 Tel: 00863733328084 Fax: 00863733326524
                                                                                                                Contact: Cun-Shuan Xu
                                                                                                                                                    Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                  Homo sapiens
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                                                                                                                                                                                                       HHAGE015213 Human liver regeneration after partial
                                                                                                                                   Xu,C.S.
                                                                                                                                                Hominidae, Homo.
                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                         (bases 1 to 316)
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BY107183
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      Length 316;
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CJ077638
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DA567416
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Matches
BE543005
601068927F1 NIH_MGC_12 F
mRNA sequence.
BE543005
BE543005.1 GI:9771650
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NEDO human cDNA project (New Energy and Industrial Technology Developmental Organization, Japan); cDNA library construction: Helix Research Institute (HRI); 5'-end one pass sequencing: HRI, Research Association for Biotechnology (RAB) and Biotechnology Center, National Institute of Technology and Evaluation; 3'-end one
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1 (bases 1 to 549)

2 (skine, M., Tsuritani, K., Wakanguri, H., Yamashita, R., Yamamoto, J., Sekine, M., Tsuritani, K., Wakida, N., Yamashita, Sugiyama, T., Saito, K., Isono, Y., Irle, R., Kushida, N., Yokoi, T., Kondo, H., Wagatsuma, Yoneyama, T., Otsuka, R., Kanda, K., Yokoi, T., Kondo, H., Wagatsuma, Murakawa, K., Ishida, S., Ishidashi, T., Takahashi-Fujii, A., Murakawa, K., Ishida, S., Ishidashi, T., Takahashi-Fujii, A., Murakawa, K., Ishida, S., Kikuchi, H., Nakai, K., Isgai, T. and Sugano, Diversification and Characterization of Putative Alternative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tel: 81-438-52-3975
Fax: 81-438-52-3986
Email: flj-cdna@nifty.com
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Contact: Takao Isogai
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2-6-7 Kazusa-Kamatari, K
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Genome Res. 16 (1), 55-65 (2006)
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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Dias Neto, E., Garcia Correa, R., Verjovski-Almeida, S., Briones, M.R.,
Dias Neto, E., Garcia Correa, R., Verjovski-Almeida, S., Briones, M.R.,
Nagai, M.A., da Silva, W. Jr., Zago, M.A., Bordin, S., Costa, F.F.,
Goldman, G.H., Carvalho, A.F., Matsukuma, A., Baia, G.S., Simpson, D.H.,
Brunstein, A., GeOliveira, P.S., Bucher, P., Jongeneel, C.V.,
O'Hare, M.J., Soares, F., Brentani, R.R., Reis, L.F., de Souza, S.J. and
Simpson, A.J.
Contact: Simpson A.J.G.
Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar,
                                                                                      sequence tags
Proc. Natl. Acad. Sci. U.S.A. 97
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BF911801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                            Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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Plate: LLAM8441 row: e column: 07
High quality sequence stop: 542.
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NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)
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                                                                                                                                         Shotgun sequencing of the human transcriptome with ORF expressed
                                                                                                                                                                                                                                                                                                           Hominidae; Homo.
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Mammalia; Eutheria;
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CDNA Library Arrayed by: Incyte Genomics, Inc.

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /clone_lib="NIH_MGC_12"
/note="organ: cervix; Vector: pCMV-SPORT6; Site_1: NotI;
Site_2: Sall; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 1.4 kb. Library prepared by Life
Technologies."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /clone="IMAGE:3455214"
/tissue_type="cervical carcinoma cell line"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="mxnn.9606"
/db_xref="taxon:9606"
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mol_type="mRNA"
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Pred. No. 0.0065
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DW445957
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Matches (
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Similarity
26; Conserv
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This sequence was derived from the FAPESP/LICR Human Cancer Genome
Project. This entry can be seen in the following URL
(http://www.ludwig.org.br/scripts/gethtml2.pl?tl=MR4&t2=MR4-UT0051-
101100-001-a10&t3=2000-11-10&t4=1)
Seq primer: puc 18 forward
High quality sequence start: 21
                                                                                                                                                                                                                                                                       No. 148 Jianshe Road,
Tel: 00863733328084
                                                                                                                                                                                                                                                                                                           Henan Bioengineering Key Lab
Henan Normal University
                                                                                                                                                                                                                                                                                                                                               Contact: Cun-Shuan Xu
                                                                                                                                                                                                                                                                                                                                                                Liver regeneration after Unpublished (2003)
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Mammalia; Butheria; Euarchontoglires; Primates; Catarrhini;
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DW445957
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 Conservative
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/db_xref="taxon:9606"
/dev_stage="Adult"
/clone_lib="UT0051"
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                                                                                                 /organism="Homo sapiens"
/mol_type="mRNA"
/mol_type="mRNA"
/db_xref="teaxon:9606"
/tissue_type="liver"
/clone_lib="Human liver regeneration after partial
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89.7%;
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Score 24.2; D
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                                  Length 219;
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DW443699
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Henan Normal University
No. 148 Jianshe Road, Xinxiang
Tel: 00863733328084
Fax: 00863733326524
                                         Henan Bioengineering Key Lab
Henan Normal University
No. 148 Ulanshe Road, Xinxiang
Tel: 00863733328084
                                                                                               Liver regeneration after Unpublished (2003) Contact; Cun-Shuan Xu
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Mammalia; Eutheria;
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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DW443699
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                                                                                                                                                         (bases 1 to 287)
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              xucs@x263.net.
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/mol type="mRNA"
/db_xref="taxon:9606"
/tissue_type="liver"
/clone_Iib="Human liver regeneration after partial
Location/Qualifiers
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Henan Normal University
No. 148 Jianshe Road, Xinxiang City, P.R.China
Tel: 00863733328084
Fax: 00863733326524
                        Homo sapiens (human)
                                                                            sapiens cDNA, mRNA sequence.
DW422532
Bukaryola; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                 DW422532.1 GI:84924088
                                                                                                       HHAGE022262 Human liver regeneration
                                                                                                                     DW422532
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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/db_xref="taxon:9606"
/tissue_type="liver"
/clone_lib="Human liver regeneration after partial
                                                                                                                                                                                                                                                                                                                  /mol_type="mRNA"
/db_xref="taxon:966"
/tissue_type="liver"
/clone_Tib="Human liver regeneration
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Pred. No. 15
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DW415682
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Unpublished (2003)
Contact: Cun-Shuan Xu
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Henan Normal University
No. 148 Jianshe Road, Xinxiang
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1 (bases 1 to 312)
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Mammalia; Butheria; Euarchontoglires; Primates; Catarrhini;
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Henan Normal University
No. 148 Ulanshe Road, Xinxiang
Tel: 00863733328084
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/mol type="mRNA"
/db_xref="rtaxon:9606"
/tissue type="liver"
/clone_Tib="Human liver regeneration
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/tissue_type="liver"
/clone_lib="Human liver regeneration
                                                                                                                                                                  organism="Homo sapiens"
mol_type="mRNA"
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IL2-UT0073-191100-246-G12
BF912537
BF912537.1 GI:12303995
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This sequence was derived from the FAPESP/LICR Human Cancer Genome
Project. This entry can be seen in the following URL
(http://www.ludwig.org.br/scripts/gethtml2.pl7t1=IL2&t2=IL2-UT0073-
161100-246-G12&t3=2000-11-16&t4=1)
Seq primer: puc 18 forward
High quality sequence stop: 404.
Location/Qualifiers
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Homo sapiens (human)
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Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BF912441
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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/mol_type="mRNA"
/db_xref="taxon:9606"
/dev_stage="Adult"
/clone_lib="UT0073"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note="Torgan: uterus tumor; Vector: puc18; Site 1: Smal; Site 2: Smal; A mini-library was made by cloning products derived from ORESTES PCR (U.S. Letters Patent application No. 196,716 - Ludwig Institute for Cancer Research) profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under low stringency conditions."
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89.7%;
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Email: asimpson@ludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome
Project. This entry can be seen in the following URL
(http://www.ludwig.org.br/scripts/gethtml2.pl?ti=IL2&t2=IL2-UT0073-
191100-246-G12&t3=2000-11-19&t4=1)
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Dias Neto, E., Garci
                  Henan Bioengineering Key Lab
Henan Normal University
                                                     Liver regeneration after Unpublished (2003) Contact: Cun-Shuan Xu
                                                                                                                                                                                                  Homo sapiens
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Rua Prof. Antonio Prudente 109, 4 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Contact: Simpson A.J.G.
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Hominidae; Homo.
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                                                                                                                                             Hominidae; Homo.
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Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note=Torgan: uterus tumor; Vector: puc18; Site 1: SmaI; Site 2: SmaI, A mini-library was made by cloning products derived from ORESTES PCR (U.S. Letters Patent application No. 196,716 - Ludwig Institute for Cancer Research) profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under
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/db_xref="taxon:9606"
/dev_stage="Adult"
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Road, Xinxiang City, P.R.China
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Dias Neto, E., Garcia Correa, R., Verjovski-Almeida, S.,

Dias Neto, E., Garcia Correa, R., Verjovski-Almeida, S.,

Nagai, M.A., da Silva, W. Jr., Zago, M.A., Bordin, S., Cos

Goldman, G. H., Carvalho, A.F., Matsukuma, A., Baia, G.S.,

Goldman, G. H., Carvalho, A.F., Bucher, P., Jongenel, C.,

Brunstein, A., deOliveira, P.S., Bucher, P., Jongenel, C.,

Gruss, M. T., Carval
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                                                                                                                                                                                                                                                                                                                        Email: asimpson@ludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome
Project. This entry can be seen in the following URL
(http://www.ludwig.org.br/scripts/gethtml2.pl?tl=IL2&t2=IL2-UT0073-
131100-245-098&t3=2000-11-13&t4=1)
Seq primer: puc ls forward
Seq primer: puc ls forward
High quality sequence stop: 409.
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Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 and
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Fax: 00863733326524
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Fax: +55-11-2707001
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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                                                                                                                                                            /organism="Homo sapiens"
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/db xref="taxon:9606"
/dev stage="Adult"
/clone_lib="UT0073"
/notes Torgan: uterus tumor; Vector: puc18; Site_1: SmaI; Site_2: SmaI, A mini-library was made by cloning products derived from ORESTES PCR (U.S. Letters Patent application No. 196,716 - Ludwig Institute for Cancer Research) profiles into the puc 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under low stringency conditions."
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/tissue_type="liver"
/clone_Tib="Human_live
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             Homo
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420 bp mRNA linear EST 11-APR-2000 bb44c01.y1 NIH MGC 12 Homo sapiens cDNA clone IMAGE:2986080 5' similar to SW:\overline{VE6} \overline{HPV18} P06463 E6 PROTEIN. ;, mRNA sequence.
                                                                                         BE018031 509 bp mRNA linear EST 06-Ub73c04.yl NIH MGC 12 Homo mapienm cDNA clone IMAGE:3048006 mmillar to SW:VE6_HPV18 P06463 E6 PROTEIN. ;, mRNA mequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
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National Institutes of Health, Mammalian
Unpublished (1999)
                                                             BE018031
BE018031.1 GI:8277975
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            found through the I.M.A.G.E. Consortium/LLNL at: image.llnl.gov/image/html/iresources.shtml Seq primer: -40RP from Gibco.
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cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Washington University Genome Sequencing Center
Clone distribution: MGC clone distribution information can be
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               sapiens
                             sapiens (human)
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/note="Organ: cervix; Vector: pCMV-SPORT6; Site_1: NotI;
Site_2: SalI; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 1.4 kb. Library prepared by Life
Technologies."
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/db_xref="taxon:9606"
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Best Local Similarity
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                             source
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Contact: Robert Strausberg, Ph.D.

Email: cgapbe-r@mail.nih.gov

Tissue Procurement: ATCC

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Washington University Genome Sequencing

Clone distribution: MGC clone distribution information can

found through the I.M.A.G.E. Consortium/LLNL at:

image.llnl.gov/image/html/iresources.shtml

Seq primer: -40RP from Gibco
                                                                                                                                                                                                 Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
CDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: Incyte Genomics, Inc.
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information
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Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                         Hominidae; Homo.

1 (bases 1 to 742)

1 (bases 1 to 742)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)
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1 (bases 1 to 509)

NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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                                                                                                   found through the I.M.A.G.E. Consortium/LLNL
http://image.llnl.gov
Plate: LLAM11265 row: h column: 11
High quality sequence stop: 738.
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Location/Qualifiers
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/note="Organ: cervix; Vector: pCMV-SPORT6; Site_1: NotI; Site_2: Sall; Cloned unidirectionally. Primer: Oligo dT. Average insert size 1.4 kb. Library prepared by Life Technologies."
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/db_xref="taxon:9606"
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/mol_type="mRNA"
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/tissue_type="cervical carcinoma cell line"
/lab_host="DH10B"
                                                                              ocation/Qualifiers
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Pred. No. 16;
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103
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1 (bases 1 to 748)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian
Unpublished (1999)
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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602996552F1 NIH_MGC_12 Homo sapiens
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Similarity 89.7%;
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                                   TTAATAAGGTGCCTGCGGTGCCAGAAACC 32
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                                                                                                                                                            /clone_lib="NIH_MGC_12"
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/note="Organ: cervix, Vector: pCMV-SPORT6; Site_1: NotI; Site_2: SalI; Cloned unidirectionally. Primer: Oligo dT. Average insert size 1.4 kb. Library prepared by Life Technologies."
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/lab_host="DH10B"
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tissue_type="cervical carcinoma cell line"
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/mol_type="mRNA"
/db_xref="taxon:9606"
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                                                                                           75.6%;
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Pred. No. 17;
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                                                                                                           Score 24.2;
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                      Hominidae; Homo.

1 (bases 1 to 827)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Ge
Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: ATCC

Tissue Procurement: ATCC
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1 (bases 1 to 758)

NIH-WGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Ge Unpublished (1999)

Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov

Tissue Procurement: ATCC
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CDNA Library Arrayed by: Incyte Genomics, Inc.
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.B. Consortium/LLNL at:
http://image.llni.gov
plate: LLAM11257 row: m column: 12
High quality sequence stop: 717.
Location/Qualifiers
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BI255152.1 GI:14808275
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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                                                                                                                                                                                                                                                                                                                                    mRNA sequence.
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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                  cDNA Library Preparation: Life Technologies, Inc
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/note="forgan: cervix; Vector: pCMV-SPORT6; Site_1: NotI;
Site_2: Sall; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 1.4 kb. Library prepared by Life
Technologies."
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/db_xref="taxon:9606"
/clone="IMAGE:5106611"
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Arrayed by: Incyte Genomics,
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Best Local :
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CDNA Library Arrayed by: Incyte Genomics, Inc.
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
http://imagge.llnl.gov
Plate: LLAM11257 row: a column: 21
                                                                                                                                                                                                                                                                                                                                                                                                                          Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 (bases 1 to 833)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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602943381F1 NIH_MGC_12 Homo
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High quality sequence stop: 742.
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Clone distribution: MGC clone distribution information
found through the I.M.A.G.B. Consortium/LLNL at:
http://image.llnl.gov
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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BI223045
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/tissue_type="cervical carcinoma cell line"
/tissue_type="cervical carcinoma cell line"
/lab_host="DH10B"
/clone_lib="NHH_MGC_12"
/clone_lib="NHH_MGC_12"
/note="Organ: cervix; Vector: pCMV-SPORT6; Site_1: NotI;
Site_2: Sall; Cloned_unidirectionally. Primer: Oligo dT.
Average insert size 1.4 kb. Library prepared by Life
Technologies."
/tissue_type="cervical carcinoma cell line"
/lab_host="DH108"
/lab_host="DH108"
/clone_lib="NIH_MGC_12"
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/note="Organ: cervix; Vector: pCMV-SPORT6; Site_1: Not1;
Site_2: Sal1; Cloned unidirectionally. Primer: Oligo dT.
Syreage_insert_size 1.4 kb. Library prepared by Life
                                                                                                                             /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:5106332"
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/mol_type="mRNA"
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IMAGE:5106332 5',
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VERSION
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                                                                                 BB546557
856 bp mRNA line 601076564F1 NIH_MGC_12 Homo sapiens cDNA clone mRNA sequence.
                                                                                                                                                                                                                                                                                4 TTAATAAGGTGCCTGCGGTGCCAGAAACC 32
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2 rue Gaston Cremieux, CP 5706 - 91057 EVRY cedex - FRANCE
2 rue Gaston Cremieux, CP 5706 - 91057 EVRY cedex - FRANCE
Email: segref@genoscope.cns.fr Web: www.genoscope.cns.fr
1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime
end enriched, double-strand cDNA was digested with Not I and cloned
into the Not I and EcoR V sites of the pCMVSPORT 6 vector. Library
was normalized. Library was constructed by Life Technologies, a
division of Invitrogen. This sequence belongs to sequence cluster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Li,W.B., Gruber,C., Jessee,J. and Polayes,D. Full-length cDNA libraries and normalization Unpublished (2001)
On May 13, 2003 this sequence version replaced g1:30614402.
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                                        BE546557.1
                                                                 BE546557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             There is a virtual CDNA representing this cluster. For more information about this cluster and the virtual CDNA, see http://www.genoscope.cns.fr/cdna?s=CSODK004BB02QP1&c=4578.r. Location/Qualifiers
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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1 (bases 1 to 833)
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  sapiens (human)
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/mol type="mRNA"
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primer. Five prime end enriched, double-strand cDNA was
digested with Not I and cloned into the Not I and EcoR V
sites of the pCWVSPORT 6 vector. Library was normalized."
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3:3462758 5',
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Matches 26
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source
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                          found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
plate: LLNM0457 row: h column: 06
High quality sequence stop: 717.
                                                                                                                                                                  Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov Tissue Procurement: ATCC
                                                                                                                                                                                                                1 (bases 1 to 922)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
Unpublished (1999)
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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Plate: LLAM8460 row:
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Tissue Procurement: ATCC
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NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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/note="Organ: cervix; Vector: pCMV-SPORT6; Site_1: NotI;
Site_2: Sall; Cloned unidirectionally, Primer: Oligo dT.
Average insert size 1.4 kb. Library prepared by Life
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/tlssue_type="cervical carcinoma cell line"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: Incyte Genomics, Inc.
cDNA Sequencing by: Incyte Genomics, Inc.
DNA Sequencing by: Incyte Genomics, Inc.
found distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
plate: LLAM11277 row: n column: 13
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1 (bases 1 to 1043)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian

Unpublished (1999)

Contact: Robert Strausberg, Ph.D.
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BI256241
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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TTACAGAGGTGCCTGCGGTGCCAGAAACC 124
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/note="Organ: cervix; Vector: pCMV-SPORT6; Site_1: NotI;
Site_2: Sall; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 1.4 kb. Library prepared by Life
Technologies."
                                                                                                                                                                                      /note="Organ: cervix; Vector: pCMV-SPORT6; Site_1: Not1; Site_2: Sali; Cloned unidirectionally. Frimer: Oligo dT. Average insert size 1.4 kb. Library prepared by Life Technologies."
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/clone="IMAGE:3461429"
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'clone="IMAGB:5114316"
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                                                                                                                                                                                                                                                                                                                                                                                               213
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalla; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi; Muroidea; Muridae; Murinae; Mus.

1 (bases 1 to 554)
Marra, M., Hillier, L., Kucaba, T., Martin, J., Beck, C., Wylie, T., Underwood, K., Steptoe, M., Theising, B., Allen, M., Bowers, Y., Person, B., Swaller, T., Gibbons, M., Pape, D., Harvey, N., Schurk, R., Ritter, E., Kohn, S., Shin, T., Jackson, Y., Cardenas, M., McCann, R.,
                                                                                                                                                                                                                                            AI747399 554 bp mRNA linear EST ul05h08.yl Sugano mouse kidney mkia Mus musculus cDNA cl IMAGE:2065215 5' similar to gb:X57958 60S RIBOSOWAL PROT (HUMAN); gb:M29015 Mouse ribosomal protein L7 (MOUSE);
                                                                                                                                                                                                                  sequence.
AI747399
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 (bases 1 to 1114)
NIH-MGC http://mgc.nci.nih.gov/
National Institutes of Health, Mammalian
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602967170F1 NIH_MGC_12 Homo
mRNA sequence.
BI257598
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Mammalia; Eutheria; Buarchontoglires; Primates; Catarrhini;
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                                                                                                                                               Mus musculus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Robert Strausberg, Ph.D.
                                                                                                                                                              Mus musculus (house mouse)
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CDNA Library Arrayed by: Incyte Genomics, Inc.
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information
                                                                                                                                                                                                                                                                                                                                                                                               TTACAGAGGTGCCTGCGGTGCCAGAAACC 241
                                                                                                                                                                                                                                                                                                                                                                                                                  TTAATAAGGTGCCTGCGGTGCCAGAAACC 32
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/note="Organ: cervix; Vector: pCMV-SPORT6; Site_1: NotI; Site_2: SalI; Cloned unidirectionally. Primer: Oligo dT. Average insert size 1.4 kb. Library prepared by Life Technologies."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /clone="IMAGE:5106952"
/tissue_type="cervical carcinoma cell line"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
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89.7%;
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Pred. No. 18;
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       Contact: Lee, NH
                                       7667285
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TITLE
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                                                                                                                                                                                                                                                                                           Rattus norvegicus (Norway rat)
Rattus norvegicus
Rattus norvegicus
Eukaryota, Metazoa; Chordata, Craniata; Vertebrata, Euteleostomi;
Buharyota, Metazoa; Chordata, Craniata; Rodentia;
Mammalla; Butherla; Buarchontoglires; Glires; Rodentia;
Sciurognathi; Muroidea; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AA686665 202 bp mRNA linear EST 13-JAN-19 EST110976 Rat PC-12 cells, NGF-treated (9 days) Rattus norvegicus cDNA 5' end similar to Ribosomal protein L7, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 TTATTAATAAGGTGCCTGCGGTGCCAGAAACC 32
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Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
Other_ESTs: TC44726
                                                                                                                Comparative expressed-sequence-tag analysis of differential gene expression profiles in PC-12 cells before and after nerve growth
                                                                                                                                                                       1 (bases 1 to 202)

Lee, N. H., Weinstock, K.G., Kirkness, E.F., Earle-Hughes, J.A.,

Fuldner, R.A., Marmaras, S., Glodek, A., Gocayne, J.D., Adams, M.D.,

Kerlavage, A.R., Fraser, C.M. and Venter, J.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AA686665.1 GI:2673263
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This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tel: 314 286 1800
Fax: 314 286 1810
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The WashU-NCI Mouse EST Project 1999
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                                                      Natl. Acad. Sci.
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/clone = "Organ: kidney; Vector: pWE18S-FL3; Site 1: DraIII
/CACTGTGTGG; Site 2: DraIII (CACCATGTG); 1st strand cDNA
was primed with an oligo(dT) primer
[ATCTGGCCTTTTTTTTTTTTTTTTTT]; double-stranded cDNA was
ligated to a DraIII adaptor [TGTTGGCCTACTGG], digested
and cloned into distinct DraIII sites of the pME18S-FL3
vector (5' site CACTGTGTG, 3' site CACCATGTG). XhoI should
be used to isolate the cDNA insert. Size selection was
performed to exclude fragments <1.5kb. Library
constructed by Dr. sumio Sugano (University of Tokyo
Institute of Medical Science). Custom primers for
sequencing: 5' end primer CTTCTGCTCTAAAAGCTGCG and 3' end
primer CGACCTGCAGCTCGAGCACA."
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/mol_type="mRNA"
/strain="C57BL"
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lab_host="DH10B"
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84.4%;
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Pred. No. 20;
                                                         U.S.A. 92, 8303-8307 (1995)
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Matches
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                                                                                                                                                                                                                                                                                                                                                                             Contact: Lee, NH
The Institute for Genomic Research
9712, Medical Center Drive, Rockvil
Tel: (301)-838-3529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 (bases 1 to 212)
Lee, N.H., Weinstock, K.G., Kirkness, B.F., Earle-Hughes, J.A., Fuldner, R.A., Marmaras, S., Glodek, A., Gocayne, J.D., Adams, M.D., Fuldner, R.A., Fraser, C.M. and Venter, J.C.
Comparative expressed-sequence-tag analysis of differential gene expression profiles in PC-12 cells before and after nerve growth
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EST110842 Rat PC-12 cells, NGF-treated (9 days) Rattus norvegicus
cDNA clone RPNBN47 5' end similar to Ribosomal protein L7, mRNA
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Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
Sciurognathi; Muroidea; Muridae; Murinae; Rattus.
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Email: nhlee@tigr.org
Seq primer: M13 Reverse.
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9712, Medical Center
Tel: (301)-838-3529
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      factor
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il: nhlee@tigr.org
primer: M13 Reverse.
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2, Medical Center Drive, Rockville, MD 20850, USA
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/clone_lib="Rat PC-12 cells, NGF-treated (9 days)" /note="Vector: pBluescript SK-; Site_1: EcoRI; Site_2: XhOI; poly(A) + RAA was purified from 9-day NGF treated PC12 cells. cDNA was constructed using an oligo-dT primer and directionally cloned using the Lambda ZAP II Vector Kit by Stratagene"
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/mol_type="mRNA"
/mol_type="mRNA"
/db_xref="ATCC (inhost):2005132"
/db_xref="RATCC (inhost):2005132"
/db_xref="reaxon:10116"
/clone_lib="Rat_PC-12 cells, NGF-treated (9 days)"
/clone_lib="Rat_PC-12 cells, NGF-treated (9 days)"
/note="Vector: pBluescript_SK.; Site_1: EcoRI; Site_2:
XhoI; poly(A)+ RNA was purified from 9-day NGF-treated
PC12 cells. cDNA was constructed using an oligo-dT primer
and directionally cloned using the Lambda ZAP II Vector
Kit by Stratagene"
                                                                                                                                            clone="RPNBN47"
                                                                                                                                                              /organism="Rattus norvegicus"
/mol_type="mdNA"
/db_xref="hTCC (inhost):2005002"
/db_xref="taxon:10116"
                                                                                                                                                                                                                                                                                         ocation/Qualifiers
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92.6%;
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Pred. No. 21;
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ORGANISM
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AA685796
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Best Local :
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
Sciurognathi; Muroidea; Muridae; Murinae; Rattus.
Comparative expressed-sequence-tag analysis of differential gene expression profiles in PC-12 cells before and after nerve growth factor treatment
                                                                                                                                                                                                                                               EST108189 Rat PC-12 cells, untreated Rattus norvegicus similar to Ribosomal protein L7, mRNA sequence.
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Henan Normal University
No. 148 Jianshe Road, Xinxiang City, P.R.China
Tel: 00863733328084
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                                               1 (bases 1 to 299)
Lee, N.H., Weinstock, K.G., Kirkness, E.F.,
Fuldmer, R.A., Marmaras, S., Glodek, A., Goo
Kerlavage, A.R., Fraser, C.M. and Venter, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unpublished (2003)
Contact: Cun-Shuan Xu
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Mammalia; Butheria; Euarchontoglires; Glires; Rodentia;
Sciurognathi; Muroidea; Muridae; Murinae; Rattus.
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                                                                                                                                                                                Rattus norvegicus (Norway rat)
                                                                                                                                                                                                                     AA685796.1 GI:2672394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Email: xucs@x263.net.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     tissue type="liver"
/clone_lib="Liver regeneration after partial hepatectomy"
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/db_xref="taxon:10116"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         organism="Rattus norvegicus"
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Pred. No. 21;
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                                                              Gocayne, J.D.,
                                                                              Earle-Hughes, J.A.,
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Contact: Lee, NH
Contact: Lee, NH
The Institute for Genomic Research
9712, Medical Center Drive, Rockville, MD
Tel: (301)-838-329
Tel: (301)-838-0208
                                                                  Local Similarity
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199
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LRAGE062146 Liver regeneration
norvegicus cDNA, mRNA sequence.
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Seq primer: M13 Reverse.
Location/Qualifiers
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Henan Normal University
                                                                                                                                                                                                                                                                                                             Contact: Cun-Shuan Xu
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Unpublished (2003)
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AAAAAGGTTCCTGCGGTGCCAGAAACC 173
                       AATAAGGTGCCTGCGGTGCCAGAAACC 32
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                                                                                                                                                                                                                                                     148 Jianshe Road, Xinxiang City, P.R.China
: 00863733328084
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/db_xref="taxon:10116"
/db_xref="taxon:10116"
/db_xref="taxon:10116"
/clone_lib="Nat PC-12 cells, untreated"
/clone_lib="Nat PC-12 cells, untreated"
/note="Vector: pBluescript SK-; Site_1: EcoRI; Site_2:
XhoI; poly(A)+ RNA was purified from untreated PC12 cells
cultured for 9 days. cDNA was constructed using an
oligo-dT primer and directionally cloned using the Lambda
ZAP II Vector Kit by Stratagene"
                                                                                                                      /organism="Rattus norvegicus"
/mol type="mRNA"
/db_xref="taxon:10116"
/tlssue_type="liver"
/clone_Tib="Liver regeneration after partial hepatectomy"
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/mol_type="mRNA"
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                                                                  74.4%;
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Pred. No. 22;
0; Mismatches
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Pred. No. 22;
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutomammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi; Muroidea; Muridae; Murinae; Rattus.

1 (bases 1 to 344)

Sleeman, M.A., Murison, J.G., Strachan, L., Kumble, K.D., G. McGrath, A., Grierson, A., Havukkala, I., Tan, P.L.J. and W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 (bases 1 to 341)
Lee,N.H., Weinstock,K.G., Kirkness,E.F., Earle-Hughes,J.A.,
Fuldner,R.A., Marmaras,S., Glodek,A., Gocayne,J.D., Adams,M.D.,
Fulavage,A.R., Fraser,C.M. and Venter,J.C.
Comparative expressed-sequence-tag analysis of differential gene
expression profiles in PC-12 cells before and after nerve growth
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EST108644 Rat PC-12 cells, NGF-treated (9 days) Rattus norvegicus
cDNA clone RPNAD62 5' end similar to Ribosomal protein L7, mRNA
                                                                                                                                               Rattus norvegicus
                                                                                                                                                                                                                BE127031.1 GI:8549739
                                                                                                                                                                                                                                           BE127031
                                                                                                                                                                                                                                                              mRNA sequence.
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DEPA0780 Rat Lambda
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Contact: Lee, NH
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Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
Sciurognathi; Muroidea; Muridae; Murinae; Rattus.
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                                                                                                                                                                  Rattus norvegicus (Norway rat)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The Institute for Genomic Research
9712, Medical Center Drive, Rockvi
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(301)-838-0208
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/mal_type="mRNA"
/mal_type="mRNA"
/db_xref="ATCC (inhost):2003267"
/db_xref="taxon:10116"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /clone_lib="Rat PC-12 cells, NGF-treated (9 days)"
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Pred. No. 2
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                                                                                                                      Euteleostomi;
                                                                                                                                                                                                                                                                                    EST 15-JUN-2000
gicus cDNA 5',
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       Glenn, M.P., Watson, J.D.
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JOURNAL COMMENT
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AI229881
LOCUS
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 Query Match
Best Local S
Matches 25
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Best Local
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Rattus sp.
Rattus sp.
Rattus sp.
Rattus sp.
Rattus sp.
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Bummalia; Eutheria; Euarchontoglires; Glires; Rodentia;
Sciurognathi; Muroidea; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                         The Institute for Genomic Research 9712, Medical Center Drive, Rockvil 7911, Medical Center Drive, Rockvil 7911, 438-3529
Fax: (301)-838-0208
Email: nhlee@tigr.org
Seq primer: M13-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6 AATAAGGTGCCTGCGGTGCCAGAAACC 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Genesis Research and Development Corporation Limited P.O. Box 50, 1 Fox St, Parnell, Auckland, New Zealand Tel: 0064 9 373 5600 Fax: 0064 9 373 2189
                                                                                                                                                                                                                                                                                                                                                                                       Unpublished (1998)
Contact: Lee, NH
                                                                                                                                                                                                                                                                                                                                                                                                                                          1 (bases 1 to 346)
Lee, N. H., Glodek, A., Chandra, I., Mason, T. M., Quackenbush, J.,
Kerlavage, A.R. and Adams, M.D.
Rat Genome Project: Generation of a Rat EST (REST) Catalog &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EST226576 Normalized rat embryo, REMCN80 3' end, mRNA sequence.
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Contact: Sleeman MA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Email: m.sleeman@genesis.co.nz
                    Similarity
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     Conservative
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                                                                                     /dev_stage="embryo 8, 12, 18 dpc"
/clone_lib="Normalized rat embryo, Bento
/note="Vector: pT7T3Pac; Site_1: EcoRI;
                                                                                                                                                               /mol_type="mRNA"
/db_xref="ATCC (inhost):2036659"
/db_xref="taxon:10118"
                                                                                                                                                                                                                                                            Location/Qualifiers
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/mol_type="mRNA"
/strain="Dark-Agouti"
                                                                                                                                                                                                                      organism="Rattus sp."
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/cell_type="dermal papilla"
/clone_lib="Rat Lambda ZAP Express Library"
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                                                                                                                                                 one="REMCN80"
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                  74.4%;
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Score 23.8; D
Pred. No. 23;
0; Mismatches
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Pred. No. 22;
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DW311724/c
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AUTHORS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The Institute for Genomic Research 9712, Medical Center Drive, Rockvill Tel: (301)-838-3529
Fax: (301)-838-0208
Email: nhlee@tigr.org
For clone availability please contact (tdbinfo@tdb_tigr.org) TC (Tentative
                                                                                                                                                                                                                                          69
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                                                     norvegicus cDNA, mRNA s
DW311724
DW311724.1 GT:84540107
EST.
                                                                                                            LRAGE072552 Liver regeneration after norvegicus cDNA, mRNA sequence.
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Lee, N. H., Weinstock, K. G., Kirkness, B.F., Earle-Hughes, J.A., Fuldner, R.A., Marmaras, S., Glodek, A., Gocayne, J.D., Adams, M.D., Fuldner, R.A., Fraser, C.M. and Venter, J.C.
Kerlavage, A.R., Fraser, C.M. and Venter, J.C.
Comparative expressed-sequence-tag analysis of differential gene expression profiles in PC-12 cells before and after nerve growth
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Contact: Lee, NH
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Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
Sciurognathi; Muroidea; Muridae; Murinae; Rattus.
   Eukaryota;
                    Rattus norvegicus
                                    Rattus norvegicus (Norway rat)
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                                                                                                                                                                                                                                                                                                             74.4%;
ilarity 92.6%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                    /clone_lib="Rat PC-12 cells, NGF-treated (9 days)"
/note="Vector: pBluescript SK-; Site_1: EcoRI; Site_2:
XhoI; poly(A)+ RNA was purified from 9-day NGF treated
PC12 cells. cDNA was constructed using an oligo-dT primer
and directionally cloned using the Lambda ZAP II Vector
Kit by Stratagene"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Rattus norvegicus"
/mol_type="mRNA"
/db_xref="ATCC (inhost):2003904"
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O; Mismatches
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Henan Normal University
No. 148 Jianshe Road, Xinxiang
                                                                                                                                                                                                                                                                                       Liver regeneration after Unpublished (2003) Contact: Cun-Shuan Xu
                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi; Muroidea; Muridae; Murinae; Rattus.
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Henan Normal University
No. 148 Jianshe Road, Xinxiang
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                                                                                                                                                                                                                                                                                                                                                                                                       Rattus norvegicus (Norway rat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                  norvegicus cDNA, mRNA sequence.
DW380853
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                                                                                                                                                                                                                                                                                                                               Xu,C.S.
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Location/Qualifiers
                                                                                                                                                                                                                xucs@x263.net.
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/mol type="maRM.
/mol type="maRM.
/db xref="reaxon.10116"
/tissue_type="liver"
/clone_lib="Liver regeneration after partial hepatectomy"
                                                                                                                     /organism="Rattus norvegicus"
/mol type="mRNA"
/db_xref="rtaxon:10116"
/tissue_type="liver"
/clone_lib="Liver regeneration after
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Contact: Sleeman
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                                                                                                                                   Rattus norvegicus
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1 (Dases 1 to 367)
1 (Dases 1 to 367)
Sleeman, M.A., Murison, J.G., Strachan, L., Kumble, K.D., Glenn, M. Sleeman, M.A., Grierson, A., Havukkala, I., Tan, P.L.J. and Watson, McGrath, A., Grierson, A., Havukkala, I., Tan, P.L.J. and Watson, McGrath, A., Grierson, A., Havukkala, I., Tan, P.L.J. and Watson, McGrath, A., Grierson, J.G., Strachan, L., Kumble, K.D., Glenn, M. Strachan, J. Grierson, J.G., Strachan, J., Kumble, K.D., Glenn, M. Strachan, J., Kumble, K.D., Glenn, M. Strachan, J., Kumble, K.D., Glenn, M. Strachan, J., Kumble, K.D., Glenn, M. Strachan, J., Kumble, K.D., Glenn, M. Strachan, J., Kumble, K.D., Glenn, M. Strachan, J., Kumble, K.D., Glenn, M. Strachan, J., Kumble, K.D., Glenn, M. Strachan, J., Kumble, K.D., Glenn, M. Strachan, J., Kumble, K.D., Glenn, M. Strachan, J., Kumble, K.D., Glenn, M. Strachan, J., Kumble, K.D., Glenn, M. Strachan, J., Kumble, K.D., Glenn, M. Strachan, J., Kumble, K.D., Glenn, M. Strachan, J., Kumble, K.D., Glenn, M. Strachan, J., Kumble, K.D., Glenn, M. Strachan, J., Kumble, K.D., Glenn, M. Strachan, J., Kumble, K.D., Glenn, M. Strachan, J., Kumble, K.D., Glenn, M. Strachan, J., Kumble, K.D., Glenn, M. Strachan, M. Strachan, M. Strachan, J., Kumble, K.D., Glenn, M. Strachan, M. S
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Genesis Research and Development Corporation Limited
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Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
Sciurognathi; Muroidea; Muridae; Murinae; Rattus.
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Roslin, Midlothian,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa;
Mammalia; Eutheria;
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/db_xref="taxon:9823"
/clone="C0003105_L12"
/tissue_type="ovary"
/clone_lib="CSEQRAN19"
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NotI; Single pass sequencing; Normalised library
constructed from pooled ovaries"
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Location/Qualifiers
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                                                                                                                                                                                                                                           papilla
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RESULT 42
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           DW383713 386 by LRAGE028724 Liver regeneration
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                                                                                                                                                                                                                                                                                                                                      No. 148 Jianshe Road, Xinxiang
Tel: 00863733328084
Fax: 00863733326524
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Henan Normal University
                                                                                                                                                                                                                                                                                                                                                                                                                       Liver regeneration after Unpublished (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mammalia; Eutheria; Euarchontoglires; Glires; Roc
Sciurognathi; Muroidea; Muridae; Murinae; Rattus.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tel: 0064 9 373 5600
Fax: 0064 9 373 2189
Email: m. sleeman@genesis.co.nz
Seq primer: T3 forward
                                                                                                                                                                                                                                                                                                                                                                                                             Contact: Cun-Shuan Xu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rattus norvegicus (Norway rat)
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norvegicus cDNA, mRNA sequence.
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Location/Qualifiers
                                                                                                                                                      Conservative
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                                                                                                                                                                                                                                                                                                                           xucs@x263.net.
                                                                                                                                                                                                                       /organism="Rattus norvegicus"
/mol type="mRNA"
/db_xref="taxon:10116"
/tissue type="liver"
/clone_Tib="Liver regeneration after partial hepatectomy"
                                                                                                                                                                                                                                                                                                          ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /tissue_type="vibrissae"
/cell_type="dermal papilla"
/clone_lib="Rat Lambda ZAP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="mRNA"
/strain="Dark-Agouti"
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Pred. No. 2:
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after partial hepatectomy Rattus
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Unpublished (2003) 
Contact: Cun-Shuan
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Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
Sciurognathi; Muroidea; Muridae; Murinae; Rattus.
                                                                                                                                                                                   Henan Bioengineering Key Lab
Henan Normal University
No. 148 Jianshe Road, Xinxiang
Tel: 00863733328084
Fax: 00863733326524
                                                                                                                                                                                                                                                        Unpublished (2003)
Contact: Cun-Shuan Xu
                                                                                                                                                                                                                                                                                                                                                                                                                                 norvegicus cDNA,
DW383827
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Henan Normal University
No. 148 Jianshe Road, Xinxiang
                                                                                                                                                                         Email: xucs@x263.net.
                                                                                                                                                                                                                                                                                                    Xu,C.S.
                                                                                                                                                                                                                                                                                                                               Sciurognathi; Muroidea; Muridae;
                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
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Fax: 00863733326524
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74.4%;
ilarity 92.6%;
Conservative
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llarity 92.6%;
Conservative
                                                                  /organism="Rattus norvegicus"
/mol type="mRNA"
/db_xref="rtaxon:10116"
/tissue type="liver"
/clone_Tib="Liver regeneratio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mol_type="mRNA"
/db_xref="taxon:10116"
/tissue_type="liver"
/clone_lib="Liver regeneration
                                                                                                                                           Cocation/Qualifiers
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mol_type="mRNA"
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Pred. No. 23;
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                                                       Liver regeneration after PH
Unpublished (2003)
Contact: Cun-Shuan Xu
Henan Bioengineering Key Lab
Henan Normal University
No. 148 Jianshe Road, Xinxiang C:
                                                                                                                                                                                                                                                                                                                                          LRAGE029928 Liver regeneration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        σ
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Henan Normal University
No. 148 Jianshe Road, Xinxiang City, P.R.China
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi; Muroidea; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DW385499 398 bp mRNA linear EST 14-JAN-:
LRAGE029676 Liver regeneration after partial hepatectomy Rattus
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                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
Sciurognathi; Muroidea; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Liver regeneration after 
Unpublished (2003)
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                                                                                                                                                                                                                                                                                            DW386589.1
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                                                                                                                                                                                                                                                         Rattus norvegicus (Norway rat)
                                                                                                                                                                                                                                                                                                                           norvegicus cDNA, mRNA sequence.
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                                                                                                                                                                              (bases 1 to 401)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        74.4%;
ilarity 92.6%;
Conservative
                                                 00863733328084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       00863733326524
L: xucs@x263.net.
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                                00863733326524
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /db_xref="taxon:10116"
/tissue_type="liver"
/clone_Tib="Liver_regeneration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      organism="Rattus norvegicus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ocation/Qualifiers
                                                                                                                                                                                                                                                                                            GI:84890711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       type="mRNA"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 23.8; D
Pred. No. 23;
0; Mismatches
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                                                              City, P.R.China
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 398;
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REFERENCE
AUTHORS
TITLE
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ORGANISM
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VERSION
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AA956776
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PUBMED
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AA956776 EST 04-JUL-199: ARNA linear EST 04-JUL-199: UI-R-E1-fr-f-11-0-UI.81 UI-R-E1 Rattus norvegicus cDNA clone UI-R-E1-fr-f-11-0-UI 3' similar to gi|206735|gb|M17422|RATRPL7 Ratricosomal protein L7 mRNA, 5' end, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The sequence tag present in the cDNA between the NotI site and the oligo-dT track served to identify it as a clone from the normalized adult 18-Day-Embryo library. Carrary Preparation: M. Fatima Bonaldo, Ph.D. Clone distribution: clones will be available through Research Genetics This clone is also available through the I.M.A.G.E. Consortium at LLNL (info@image.llnl.gov). IMAGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          University of Iowa
375 Newton Road, 4156 MEBRF, Iowa City, IA 52242,
Tel: 319 335 8250
Fax: 319 335 9565
Email: bento-soares@uiowa.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Contact: Soares, MB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     On May 7, 1998 this sequence version replaced gi:3120471.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 (bases 1 to 415)
Bonaldo, M.F., Lennon, G. and Soares, M.B.
Normalization and subtraction: two approaches to facilitate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rattus norvegicus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Seq primer: M13 Forward
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[D=1779946
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/dev_stage="adult"
//lab host="DH10B (Life Technologies)"
//lab host="DH10B (Life Technologies)"
//clone_lib="UI-R-E1"
//note="Vector: pT7T3D-PacI; Site_1: Not I; Site_2: Eco RI;
//note="Vector: pT7T3D-PacI; Site_1: Not I; Site_2: Eco RI;
//note="Vector: pT7T3D-PacI; Site_1: Not I; Site_2: Eco RI;
//note="Vector: pT7T3D-PacI; Site_1: Not I; Site_2: Constructed from B (UI-R-E0) library consisted from Enixture of individually tagged normalized libraries constructed from B, 12 and 18-day embryo. The tag is a string of 3-5 nucleotides present between the Not I site and the oligo-dT track which allows identification of the library of origin of a clone within the mixture. The subtracted library (UI-R-E1) was constructed as follows:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Rattus norvegicus"
/mol type="mRNA"
/db_xref="taxon:10116"
/tissue type="liver"
/clone_Tib="Liver regeneration after partial hepatectomy"
                                                                                                                                                                                                                                                                                                                    /organism="Rattus norvegicus"
/mol_type="mRNA"
/strain="Sprague-Dawley"
/db xref="taxon:10116"
/clone="UI-R-E1-fr-f-11-0-UI"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
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Pred. No. 23;
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RESULT 47 CF273504 LOCUS

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Query Match
Best Local S
Matches 25
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Best Local Similarity
Matches 25; Conserv
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    25;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi; Muroidea; Muridae; Murinae; Rattus.

1 (bases 1 to 478)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Contact: Wong P
University of Alberta
G502 Biological Sciences Centre, Edmonton,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rattus norvegicus (Norway rat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IGAM8 Rat Lambda Zap 4 h light-exp
norvegicus cDNA 5', mRNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BACKWARD: T3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: pwwong@ualberta.ca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PCR PRimers
                     Similarity
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74.4%;
ilarity 92.6%;
Conservative
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780 492 9234
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                                                                                                    /note="Vector: Uni-ZAP XR; The Rat Lambda Zap 4 h light-exposed retina cDNA library was constructed from retinal RNA isolated from weanling male albino Sprague-Dawley rats, which were maintained in darkness for 40 days. At 61 days of age rats were exposed to intense visible light (490-580 nm; 1200 to 1400 lux) for 4 hours."
                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                             /tissue_type="retina"
/dev_stage="adult"
                                                                                                                                                                                                                                                                                                                                                                                    organism="Rattus norvegicus"
/mol_type="mRNA"
                                                                                                                                                                                                                                    ibrary
                                                                                                                                                                                                                                                                                                                                                              strain="Sprague-Dawley"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GI:47825552
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                                                                                                                                                                                                                                                       lib="Rat Lambda Zap 4 h light-exposed retina
Score 23.8; D
Pred. No. 24;
0; Mismatches
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Pred. No. 23;
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AJ647149
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AA944687
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AJ647149.1
EST.
                                                                                                             Sus scrofa
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Suina; Suidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unpublished (1998)
Contact: Lee, NH
The Institute for Genomic Research
9712, Medical Center Drive, Rockville,
Tel: (301)-838-3529
Fax: (301)-838-0208
Email: nhlee@tigr.org
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      σ
            embryo development in pigs and
Unpublished (2004)
Contact: Anderson SI
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EST200186 Normalized rat embryo,
REMAM79 3' end, mRNA sequence.
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Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
Sciurognathi; Muroidea; Muridae; Murinae; Rattus.
                                                         Anderson, S.I., Finlayson, H.A. and Archibald, A.L.
Development of cDNA and EST resources for studying reproduction and
                                                                                                                                                                  Sus scrofa (pig)
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Lee, N.H., Glodek, A., Chandra, I., Mason, T.M.,
Kerlavage, A.R. and Adams, M.D.
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AA944687.1 GI:3104603
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                                                                                          (bases 1 to 498)
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and Bioinformatics
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/clone_lib="Normalized rat embryo, Bento Soares"
/note="Vector: pT7T3Pac; Site_1: EcoRI; Site_2: |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Rattus sp."
/mol_type="mRNA"
/db_xref="mTCC (inhost):2014151"
/db_xref="taxon:10118"
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Pred. No. 24;
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C0003104_N19, mRNA
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Matches 25; Conserv
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Roslin Midlothian, EH25 9PS, UNITED KINGDOM
Roslin Midlothian, EH25 9PS, UNITED KINGDOM
Single pass sequencing. Bases called and trimmed with phred
v0.020425.c. Vector identified by cross match with the -minscore 20
and -minmatch 12 options. Vector:pBlueScriptII(KS) R. Site1: EcoRI
R. Site2: NotI 5' Seq Primer M13F Normalised library constructed
from poolled ovaries. Clones available from UK Centre for Functional
Genomics in Farm Animals, Roslin Institite, Roslin, Midlothian, UK,
EH25 9PS, www.ark-genomics.org.
Location/Qualifiers
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Roslin, Midlothian, EH25 9PS, UNITED KINGDOM
Single pass sequencing. Bases called and trimmed with phred
Single pass sequencing. Bases called and trimmed with phred
v0.020425.c. Vector identified by cross match with the -minscore 20
and -minmatch 12 options. Vector:pBlueScriptII(KS) R. Sitel: EcoRI
R. Site2: NotI 5' Seq Primer M3F Normalised library constructed
from pooled ovaries. Clones available from UK Centre for Functional
Genomics in Farm Animals, Roslin Institute, Roslin, Midlothian, UK,
EH25 9PS, www.ark-genomics.org.
Location/Qualifiers
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Development of cDNA and EST resources for studying reproduction and embryo development in pigs and cattle
Unpublished (2004)
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Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Suina; Suidae;
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NotI; Single_pass sequencing; Normalised library
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/clone="C0003275_B08"
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Pred. No. 24;
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a cDNA clone C0003275_B08, mRNA
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Aat72382 Human Pap
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962 14.8 70.5 990 4 963 14.8 70.5 990 6 964 14.8 70.5 990 6 965 14.8 70.5 990 8 966 14.8 70.5 1006 6	959 14.8 70.5 947 6 ABQB8412 960 14.8 70.5 947 10 ADI04360 961 14.8 70.5 950 6 ABS58764	957 14.8 70.5 945 6 ABL55954 Abl55954 958 14.8 70.5 945 10 ADD18115 Add1813	956 14.8 70.5 930 6 ABK68458	953 14.8 70.5 926 12 ADN13728 Adn1372 953 14.8 70.5 927 4 ANN32077 Ash32077	951 14.8 70.5 924 8 ACASCA92	9 14.8 70.5 877 4 AAH03789 Aah03789 0 14.8 70 5 888 4 AAH72572 Aah72572	7 14.8 70.5 828 4 AAH06689 8 14.8 70.5 854 4 AAD13387	946 14.8 70.5 788 8 ACA18039 Aca18039	944 14.8 70.5 750 12 ADE83846 Ade8384 945 14.8 70.5 788 4 AAS50729 Aas50729	943 14.8 70.5 750 8 ACA33940 Aca33940	941 14.8 70.5 747 4 AAK70016 Aak70018	940 14.8 70.5 747 4 AAK70017 Aak70017	14.8 70.5 717 13 ADT47272 Adt4727	14.8 70.5 717 10 ACC61063 14.8 70.5 717 10 ADK62837	14.8 70.5 695 2 AAV88509	14.8 70.5 629 12 ADO35352 14.8 70.5 669 6 ABO72466	931 14.8 70.5 626 8 ABZ18524 932 14.8 70.5 629 12 ADK19690	929 14.8 70.5 591 11 ADX42741 930 14.8 70.5 602 4 AAK57308	928 14.8 70.5 591 11 ADT96259	926 14.8 70.5 589 4 ABS34967	924 14.8 70.5 589 4 ARXIS5221	922 14.8 70.5 589 4 ABA61039	920 14.8 70.5 560 6 ABK35222 921 14.8 70.5 583 4 AAK84599	918 14.8 70.5 546 3 AAAA16461 919 14.8 70.5 557 3 AAAA4330	917 14.8 70.5 530 10 ADC32587 Adc3258	14.8 70.5 521 4 AAS31024 14.8 70.5 521 6 ABO72457	914 14.8 70.5 495 14 ACL61542 Acl6154	912 14.8 70.5 486 6 ABK71633	910 14.8 70.5 478 3 AACOO809 Adw0595 911 14.8 70.5 482 14 ADW05992 Adw0595	14.8 70.5 473 12 ADM87613	14.8 70.5 463 9 ACH34974 14.8 70.5 473 4 AAH99869	906 14.8 70.5 457 5 AAS42486	904 14.8 70.5 441 8 ADA23046 905 14.8 70.5 444 6 AAD35160	903 14.8 70.5 425 3 AAC27730	901 14.8 70.5 411 13 ADQ53686 Adq53686	14.8 70.5 403 6 ABL65575 AD165575 14.8 70.5 403 9 ACH18414 Ach18414	14.8 70.5 403 6 ABL64802	14.8 70.5 403 4 AAI86387 Aa186387 Aa186387

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RESULT 1
AAT72382/c
ID AAT723
XX AAT723
XX D9-FEB
XX Human
XX Human
XX Human
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XX Human
XX EP7745
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                                                                                                                                                                                                                                                                                                              cervical smear;
                                                                                                                                                                                                                    09-FEB-1998
                Claim 8; Page 52; 70pp; English.
                               Probes for detection of Human Papillomavirus Type 16 and Type 18 - can distinguish between Type 16 and 18, associated with genital cancers.
                                                                    Gordon P,
                                                                                                    15-NOV-1995;
                                                                                                                  15-NOV-1996;
                                                                                                                                 21-MAY-1997
                                                                                                                                                               Human papillomavirus
                                                                                                                                                                                     Human Papillomavirus; probe; target region; genital cancer;
                                                                                                                                                                                                    Human Papillomavirus Type 16 target region.
                                                                                                                                                                                                                                                  AAT72382 standard; DNA; 21 BP.
                                                      WPI; 1997-274349/25.
                                                                                    (GENP-) GEN-PROBE INC.
                                                                    Brentano ST,
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                                                                                                   95US-0006854P
                                                                                                                  96EP-00308264.
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1131
                                                                     Carter NM,
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ADI16270
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AAC45355
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AAI99074
AAI63424
ABQ54790
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ADF03820
AAS85492
AAZ52916
ADL62148
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ADX30109
ADP10589
ADE96111
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ADM87151
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Addi6270 Human nuc
Adx30111 Plant ful
Adx30109 Plant ful
Adx30109 Plant ful
Adp10589 Reference
Ade96111 Human uri
Adk15020 Urinary s
Adu05459 DNA encod
Adm87151 Human prod
Abk36130 CONA sequ
Adx45523 Plant ful
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Aaz52916 Human pro
Ad162248 Human ova
Ab189741 Human pol
Abx71649 Human dit
Abx51788 Human mdd
Adc90749 E. faeciu
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Ady72224 Human BMY
Ady72223 Human BMY
Adc86548 Human GPC
Acn39428 Tumour-as
Ade08782 Novel DNA
Adf03820 Bacterial
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Aah15344 Human cDN
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Abq54790 Human
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Adc85574 Human GPC
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Novel hybridisation assay probes have been developed comprising an

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Best Local S
Matches 21
Novel hybridisation assay probes have been developed comprising an oligonuclectide which will hybridise under selected conditions to Human oligonuclectide which will hybridise under selected conditions to Human Papillomavirus (HPV) Type 16 and/or 18 (but not Types 6, 11, 31, 33, 35, 39, 45, 51, 52, or 58) target nucleic acids to form detectable target: probe duplex. The present sequence represents a specifically claimed target region. Oligonucleotides are useful to detect HPV Type 16 and/or 18 in samples e.g. cervical smears, body fluid, and distinguish these from other HPV variants. Papillomaviruses are small DNA viruses and HPV Types 16 and 18 are associated with genital cancers. HPV PCR primers can amplify HPV Type 16 and/or 18 nucleic acid in a sample. HPV Type 16 and/or 18 nucleic acid in a sample. HPV Type 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human Papillomavirus Type 16 target region
                                                                                                                                                                                                                                                                                                                                                                    Gordon P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human papillomavirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human Papillomavirus; probe; target region; genital cancer; HPV;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAT72381 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 21 BP; 5 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                  Claim 8, Page 52; 70pp; English.
                                                                                                                                                                                                                                                                      distinguish between Type 16 and
                                                                                                                                                                                                                                                                       Probes for detection of Human Papillomavirus Type 16 and Type 18 - c distinguish between Type 16 and 18, associated with genital cancers.
                                                                                                                                                                                                                                                                                                                               WPI; 1997-274349/25.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EP774518-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cervical smear; ss.
                                                                                                                                                                                                                                                                                                                                                                                                          (GENP-) GEN-PROBE INC.
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RESULT 3
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COS Human Papillomavirus Type
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                                                          CC Novel hybridisation assay probes have been developed comprising an CC oligonucleotide which will hybridise under selected conditions to Human CC papillomavirus (HPV) Type 16 and/or 18 (but not Types 6, 11, 31, 33, 35, CC 39, 45, 51, 52, or 58) target nucleic acids to form detectable target: CC probe duplex. The present sequence represents a specifically claimed CC target region. Oligonucleotides are useful to detect HPV Type 16 and/or CC 18 in samples e.g. cervical smears, body fluid, and distinguish these CC from other HPV variants. Papillomaviruses are small DNA viruses and HPV CC Types 16 and/or 18 are associated with genital cancers. HPV PCR primers can CC amplify HPV Type 16 and/or 18 nucleic acid is optionally amplified. Type 16 or CC cand/or 18 can be detected by adding a probe and detecting probe trarget CC one specifically detected by amplifying nucleic acids with at least CC one specifically claimed PCR primer. For Type 18 detection, a helper CC probe may be used. Oligonucleotides can distinguish target sequences from CC sera react with antigens of all papillomaviruses
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Best Local S
Matches 21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Probes for detection of Human Papillomavirus Type 16 and Type 18 - can distinguish between Type 16 and 18, associated with genital cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human Papillomavirus; probe; target region; genital cancer; HPV; cervical smear; ss.
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Query Match

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Length 21;

RESULT 5 AAN93015

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                                                                                                                                     CC Papillomavirus (HPV) Type 16 and/or 18 (but not Types 6, 11, 31, 33, 35, 35, or 58) target nucleic acids to form detectable target: CC grobe duplex. The present sequence represents a specifically claimed CC target region. Oligonucleotides are useful to detect HPV Type 16 and/or 18 in samples e.g. cervical smears, body fluid, and distinguish these CC from other HPV variants. Papillomaviruses are small DNA viruses and HPV CC Types 16 and/or 18 nucleic acid in a sample. HPV Type 16 and/or 18 nucleic acid in a sample. HPV Type 16 or CC amplify HPV Type 16 and/or 18 nucleic acid is optionally amplified. Type 16 or CC quplex formation; target nucleic acid is optionally amplified. Type 16 or CC 18 can be specifically detected by amplifying nucleic acids with at least CC one specifically claimed PCR primer. For Type 18 detection, a helper CC probe may be used. Oligonucleotides can distinguish target sequences from CC phylogenetically close HPV Types 16 and 18 whilst available detection CC sera react with antigens of all papillomaviruses
                                                                     Query Match
Best Local :
                                                         Matches
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                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                Novel hybridisation assay probes have been developed comprising oligonucleotide which will hybridise under selected conditions t
                                                                                                                                                                                                                                                                                                                                                                                                                                      Probes for detection of Human Papillomavirus Type 16 and Type 18 - can distinguish between Type 16 and 18, associated with genital cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1997-274349/25.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-NOV-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15-NOV-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human papillomavirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cervical smear; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human Papillomavirus; probe; target region; genital cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human Papillomavirus Type 16 target region.
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                                                                                                                                                                                                                                                                                                                                                                                                            8; Page 53; 70pp;
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                            1 CAGGACACAGTGGCTTTTGAC
                                                                     Similarity
CAGGACACAGUGGCUUUUGAC 21
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                                                                                   Score 21;
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                                                         Mismatches
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RESULT 6
AAN91584
ID AAN9
XX AAN9
AC AAN9
XX 27-A
DT 17-J
XX Prob
DE Prob
DE Situ
XX Huma
KW Huma
KW Huma
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                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local S
Matches 21
                                                                                                               Human papilloma virus; type 16; in situ hybridisation assay; cellular smear; probe 6; benign wart; cervical cancer.
                                                                                                                                                                              27-AUG-2003
17-JUL-1990
                                                                                                                                                                                                                                  AAN91584 standard;
                                                                                                                                                                                                                                                                                                                                                                                        The probe is complemetary to Human Papillomavirus bases 420-444 in gene E6 of HPV type 16. See also (Updated on 31-OCT-2002 to add missing OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31-OCT-2002
13-FEB-1990
          02-OCT-1987;
                               30-SEP-1988;
                                                                                          Human papillomavirus
                                                                                                                                                Probe 6 for the detection of human papilloma virus (HPV) type situ hybridisation assay.
                                                                                                                                                                                                             AAN91584;
                                                                                                                                                                                                                                                                                                                                                                      Sequence 24 BP; 5 A; 6 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 22; 28pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1989-192703/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09-DEC-1987;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    06-DEC-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15-JUN-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO8905357-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Probe for detecting human papillomavirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAN93015 standard;
                                                    06-APR-1989.
                                                                        WO8902934-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (MICR-) MICROPROBE CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                       exclusion agents for enhancing in situ hybridisation - determn. of poly-nucleotide targets in cells by fixing t transparent solid support and hybridising, etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     papillomavirus; polynucleotide probe
                                                                                                                                                                                                                                                                                       4
                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                     CAGGACACAGTGGCTTTTGAC 21
                                                                                                                                                                                                                                                                                     CAGGACACAGTGGCTTTTGAC 24
                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                             (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (revised)
(first entry)
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          87US-00103979
                               88WO-US003367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    88WO-US004355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA;
                                                                                                                                                                                                                                  DNA,
                                                                                                                                                                                                                                                                                                                          100.01;
                                                                                                                                                                                                                                                                                                                                      100.0%; Score 21; 100.0%; Pred. No.
                                                                                                                                                                                                                                  24
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                                                                                                                                                                                                                                  BP.
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                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                  DB 1; Length 24;
                                                                                                                                                                                                                                                                                                                             <u>,</u>
                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                     (HPV) mRNA. It detects AAN93011-N93031.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    used for
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                                                                                                                                                         16
                                                                                                                                                                                                                                                                                                                             Gaps
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Best Local S
Matches 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The patent is for a rapid in situ hybridisation assay for detecting and typing human papilloma virus (HPV) in non-frozen cellular smears fixed to a support in absence of aldehyde-based crosslinking reagents. The assay comprises: (1) combining nucleic acid in the sample with at least one detectable probe able to hybridise with 1 or more HPV types; and (2) detecting presence or absence of hybrid complexes. Opt. several probes are used, eg one for HPV types 6 and 11, associated with benign warts, and one for types 16, 18, 31, 33 and 35, associated with cervical cancer. The assay can differentiate between HPV types. It is esp. used as a secondary test. The probes can be synthesised or cloned. (Updated on 27-AUG-2003 to correct OS field.)
                                                                  Detecting target nucleic acid by hybridisation with probe that generates looped-out region - then using second probe, hybridised to this region, to initiate nucleic acid synthesis, for disease diagnosis, detecting
                                                                                                                                                                                                                                                                                                                            Human papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                              E6 oncogene from HPV 16 target sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAV39991 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          with long labelled probe spexamining cervical smears.
                                                     pathogens
                                                                                                                        WPI; 1998-362792/31.
                                                                                                                                                  Cardy DLN;
                                                                                                                                                                                                       16-DEC-1996;
                                                                                                                                                                                                                                  16-DEC-1997;
                                                                                                                                                                                                                                                            25-JUN-1998
                                                                                                                                                                                                                                                                                       WO9827225-A1
                                                                                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                    Human papillomavirus; target; probe; detection; hybridisation;
                                                                                                                                                                                                                                                                                                                                                                                                                           08-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAV39991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 24 BP; 5 A; 6 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 19; 39pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hybridisation test for human papilloma virus in cell smears -
with long labelled probe specific for particular virus types,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Schwartz DE,
                                                                                                                                                                             (CYTO-) CYTOCELL LID
                                                                                                                                                                                                                                                                                                                                                       looped nucleic acid;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (MICR-) MICROPROBE CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 CAGGACACAGTGGCTTTTGAC 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
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                                                                                                                                                                                                       96GB-00026074.
                                                                                                                                                                                                                                  97WO-GB003449.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%;
                                                                                                                                                                                                                                                                                                                                                       diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 21;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24
                                                                                                                                                                                                                                                                                                                                                        pathogen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1; Length 24;
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A method has been developed for detecting

a target nucleic

acid

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Example 4; Page 19; 48pp; English.

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RESULT 8
ABQ73533
ID 73533
ID 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local S
Matches 21
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08-JAN-2001; 2001US-00756096.

08-JAN-2001; 2001US-00756097.

20-APR-2001; 2001US-0038858.

29-AUG-2001; 2001US-00941492.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pre-trans-splicing molecule; PTM; spliceosome; cytostatic; gene therapy; immunosuppressive; antinicrobial; gene regulation; gene repair; cancer; targeted cell death; genetic disorder; infectious disorder; autoimmune disease; proliferative disorder; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABQ73533 standard; DNA; 138
                                                                                   Novel cell having pre-trans-splicing molecules with target binding domains that target binding of PTM to pre-mRNA, 3' or 5' splice regiospacer region, nucleotide sequence to be trans-spliced to target-pre-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-JAN-2002; 2002WO-US000416.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11-JUL-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200253581-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human papillomavirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HPV-PTM related oligonucleotide #5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        02-OCT-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 100 BP; 20 A; 25 C; 18 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  additional processing
                                                                                                                                                                                                                 WPI; 2002-566693/60
                                                                                                                                                                                                                                                                              Mansfield
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          71
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                                                                                                                                                                                                                                                                                                                                                                     INTRONN
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                                                                                                                                                                                                                                                                          Garcia-Blanco
Chao H;
                                                                                                                                                                                                                                                                                                                                                                     INC.
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Pred. No.
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                                                                                                                                                                                                                                                                                                           Baker CC,
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                                                                                                                   splice region,
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Example; Fig 54; 229pp; English

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RESULT 9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention describes a cell (I) comprising pre-trans-splicing compocules (PTMs) (II) which have one or more target binding domains (IIa) that target binding of PTM to pre-mRNA, 3' splice region (IIb) that coincides branch point pyrimidine tract and 3' splice acceptor site, or 5' splice site (IIc), spacer region (IId) that separates RNA splice site (IC from target binding domain, and nucleotide sequence to (IIe) be trans-cc spliced to target-pre-mRNA, Optionally, the cell comprises (II) either comprising: (A) (IIb) and (IIe); or (B) (IIc), (IId) and (IIe). The cell comprises (II) comprises or more (preferably two or more) (IIa) and (IIb) (or (IIc)), (IId) and (IIe), or (II) comprising contacting a target pre-mRNA collected in decell (IIb) (or (IIc)), (IId) and (IIe), or (II) comprising either (A) or (B) (IId) which involves contacting a target pre-mRNA expressed in the cell contacting the first produced to target pre-mRNA propressed comprises sequence sencoting a toxin or translatable correct. The nucleotide sequence to be trans-spliced to target pre-mRNA comprises nucleotide sequences comprising exons 1-10 of cystic fibrosis trans-membrane conductance regulator (CPTR). The chimeric RNA produced using (II) which either comprises (A) or (B) further comprises a nucleotide sequence tag. (I) can be used for gene regulation, contacting genetic, infectious or autoimmune diseases and contactine diseases including genetic, infectious or autoimmune diseases and contactine acceptance and to regulate gene expression in the complification of the present invention
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Best Local S
Matches 21
                                                                                                                                                     08-JAN-2001; 2001US-00756095.

08-JAN-2001; 2001US-00756096.

08-JAN-2001; 2001US-00756097.

20-APR-2001; 2001US-0083888.

29-AUG-2001; 2001US-00941492.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human papillomavirus. Synthetic.
Mitchell LG,
Mansfield GS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              pre-trans-splicing molecule; PTM; spliceosome; cytostatic; gene therapy; immunosuppressive; antimicrobial; gene regulation; gene repair; cancer; targeted cell death; genetic disorder; infectious disorder; autoimmune disease; proliferative disorder; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 138 BP; 45
                                                                                                                                                                                                                                                                                                                                                  08-JAN-2002; 2002WO-US000416.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200253581-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HPV-PTM related oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   02-OCT-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABQ73531 standard; DNA; 193
                                                                                                (INTR-) INTRONN INC.
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   Garcia-Blanco
Chao H;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 21; DB 6; Length 138; Pred. No. 1.4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         59
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                                 Baker CC,
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                                    Puttaraju
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
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WPI; 2002-566693/60.

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RESULT 10
ADX26909/c
ID ADX269
XX ADX269
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XX UCANCE
XX CCALC
CKW CCANCE
XX CCANCE
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OS Synthe
XX Key
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Matches 21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADX26909 standard; DNA; 452
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     JP2005046117-A.
                                                                                             misc_difference
                                                                                                                                                                                                                                                    Human papillomavirus type Synthetic.
                                                                                                                                                                                                                                                                                                                             cancer; neoplasm;
                                                                                                                                                                                                                                                                                                                                                 cell culture;
                                                                                                                                                                                                                                                                                                                                                                                                   Human papillomavirus type 16 E6 delta151 mutant DNA.
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mRNA.
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                                                                                                                                                                                                                                                                                                                             immortalization; Gynecology and obstetrics; Andrology;
asm; mutant; ds.
                                                                                                                                                                           Location/Qualifiers 3. .4
                                                                                                                  /*tag= a
/note= "Wild-type bases 4-25 have been removed"
                                              note= "Wild-type bases 472-474 have been removed"
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RESULT 11
ABQ76223/c
ID ABQ762
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Matches 21; Comment
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Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to a novel immortalized endometrial glandular epithelial cell strain in which an exogenous immortalizing gene is introduced and the properties of the cell line as non-cancer typical glandular epithelial cells, are maintained. The cell line of the invention may be useful for research of reproduction, particularly for analyzing the adhesion of the fertilized egg during implantation, analyzing the effect of steroid hormones, analyzing the mechanism of multistep canceration of the inner glandular epithelial membrane by genetic engineering of the cell line which is otherwise non-cancerous, and analyzing the effect of carcinogenic substances on the cell line. The cell line maintains the properties of normal somatic cells and the properties of endometrial glandular epithelial cells. The current sequence is that of the Human papillomavirus type 16 E6 delta151 mutant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Immortalized endometrial glandular epithelial cell strain containing exogenous immortalizing gene and maintains properties of non-cancer cell and typical glandular epithelial cells, useful in field of research of
                                                                                                                                                                                                                                                                                                                                                                US6287569-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human papillomavirus E6 tumour antigen derived DNA
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                                                           Kipps TJ,
                                                                                                                                                                                   10-APR-1997;
                                                                                                                                                                                                                                            06-APR-1998;
                                                                                                                                                                                                                                                                                                           11-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                      Human papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cancer; tumour; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tumour antigen; human; vaccine; cellular immune response;
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                                                                                                                       (REGC ) UNIV CALIFORNIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        336 CAGGACACAGTGGCTTTTGAC 316
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ilarity 100.0%;
Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                97US-0043467P
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Pred. No. 1.7;
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RESULT 12
ADC37149/c
ID ADC37
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ADC37149/c
AC ADC37
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AC ADC37
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Matches 21
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                                                                                                                  Producing an immortalized non-tumorigenic human Schwann or schwannoma cell line for treating cancer or neurodegenerative disorder comprises selecting for immortalized cells that express the exogenous immortali
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              immortalised non-tumourigenic; human Schwann; schwannoma cell line; screening cancer chemotherapeutic; antineoplastic activity; carcinogenicity; neuroprotective; neurodegeneration; SV40; Simian Virus 40; adenovirus; human papilloma virus; E6; E7; cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-DEC-2003
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ADC37149 standard;
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ID ADI71963 standard; DNA; 464 BF
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AC ADI71963;
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DT 20-MAY-2004 (first entry)
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PD 27-MAR-2001; 2001WO-US009126.
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PD 27-MAR-2000; 2000US-021940P.
PR 25-MAY-2000; 2000US-0216820P.
PR 15-JUN-2000; 2000US-0216820P.
PR 25-JUL-2000; 2000US-022661P.
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PA (MILL-) MILLENNIUM PREDICTIVE
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DR WPI; 2001-611502/70.
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25-MAY-2000; 2000US-0207124P.
15-UUN-2000; 2000US-0211940P.
07-UUL-2000; 2000US-0216820P.
25-UUL-2000; 2000US-0220661P.
                                                                                                                                                                                                                                                                                                                                                               21-MAR-2001; 2001WO-US009126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human ovarian cancer DNA marker #4705.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CC encoded by the marker; antibodies that selectively bind to the college of developing ovarian cancer involving inhibiting expression of a gene corresponding to a marker of the invention and a method of treating a gene corresponding to a marker of the invention and a method of treating a gene corresponding to a marker of the invention and a method of treating a gene corresponding to a marker of the invention and a method of treating a patient afflicted with ovarian cancer complementary to a marker of the convention. The markers are useful for assessing if a patient is afflicted complementary to a marker of the convention. The marker are useful for assessing if a patient is afflicted complementary to a marker of the convention. The marker is afflicted comparing the level of expression of the comparing the level of expression of the convention one-ovarian cancer sample. A difference between the comparing the personal level of expression of a comparing the presence of a transcribed comparing the presence in the sample, a protein or protein converted protein or to a transcribed converted protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein or protein o
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  21-MAR-2000; 2000US-0191031P.
25-MAY-2000; 2000US-0207124P.
                                                                                                                                                                                                                                                               Human; ovarian cancer; ds; tumour; cytostatic; DNA marker.
                                                                                                                                                                                                                                                                                                           Human ovarian cancer
                                                                                                                                                                                                                                                                                                                                                             20-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                            ADL37114;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADL37114 standard;
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                                                                     21-MAR-2001; 2001WO-US009126.
                                                                                                                                                                                                                  Homo sapiens
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100.0%; Pred. No.
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marker corresponds to a secreted protein or to a transcribed corresponds to a secreted protein or to a transcribed secreted or its portion. The level of expression of the marker is casessed by detecting the presence in the sample, a protein or protein corresponding to the marker. The presence of protein or protein corresponding to the marker. The presence of protein or protein corresponding to the marker. The presence of a transcribed protein or protein or protein or protein or protein or protein or protein fragment. Alternatively, the level of expression of the marker is assessed by detecting the presence of a transcribed corpolynucleotide which anneals with the marker or anneals with a portion of the polynucleotide comprising the marker, under stringent conditions. The carrier which involves detecting expression of the marker in a patient which involves detecting expression of the marker in a patient thine and comparing the level of expression. The method at a subsequent time and comparing the level of expression. The method is carried out using an ovarian tissue sample. A composition comprising a marker, polypeptide or antibody of the invention is used to treat ovarian cancer. This sequence represents a human ovarian cancer DNA marker of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to nucleic acid markers which are overexpressed in ovarian cancer cells as compared to their expression in normal (i.e. noncarcous) ovarian cells. The invention also relates to polypeptides encoded by the markers, antibodies that selectively bind to the polypeptides, a method of inhibiting ovarian cancer in a patient at risk of developing ovarian cancer involving inhibiting expression of a gene corresponding to a marker of the invention and a method of treating a patient afflicted with ovarian cancer comprising providing to cells of the patient an antisense oligonucleotide complementary to a marker of the invention. The markers are useful for assessing if a patient is afflicted with ovarian cancer, which involves comparing the level of expression of a marker in a control non-ovarian cancer sample. A difference between the expression levels indicates ovarian cancer. The level of expression of a marker to a control marker ovarian cancer. The level of expression of a marker in a control marker ovarian cancer. The level of expression of a marker in a control marker ovarian cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel isolated nucleic acid molecules (markers) overexpressed in ovarian cancer cells as compared to their normal non-cancerous ovarian cells are used to characterize stage, grade, histological type of ovarian cancer.
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07-JUL-2000; 2000US-0216820P.
25-JUL-2000; 2000US-0220661P.
21-DEC-2000; 2000US-0257672P.
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                                    Human papillomavirus 16 E6
                                                        12-FEB
                                                                         ADF09607;
                                                                                           607/c
ADF09607 standard; cDNA;
                                                                                                                                                                                       Local
                                                                                                                                         88
                                                       -2004
                                                                                                                                                    1 CAGGACACAGTGGCTTTTGAC 21
                                                                                                                                                                                      Similarity
                                                                                                                                                                               Conservative
                                                       (first
                                                       entry)
                                                                                                                                                                                     100.0%;
                                                                                                                                                                                                100.0%;
                                      CDNA SEQ ID NO:108
                                                                                                                                                                              ç,
                                                                                                                                                                                      Score 21; DB 5;
Pred. No. 1.7;
                                                                                                                                          83
                                                                                                                                                                               Mismatches
                                                                                                                                                                               0
                                                                                                                                                                                                                    U; 2 Other;
                                                                                                                                                                                                 Length 464;
                                                                                                                                                                               Indels
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human; protein-protein interaction; virucide; cytostatic; vaccine; human papilloma virus; HPV; cancer; ss; gene.

유 S

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RRSULT 16
AAL54430/c
ID: AAL544
XX AAL544
XX O3-APR
XX Viruci
KW Viruci
KW select
KW human
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Best Local S
Matches 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to a novel purified complex comprising a first polypeptide and a second polypeptide, where the polypeptides comprise defined amino acid sequences listed in the specification, and where the first polypeptide binds to the second polypeptide. A complex of the invention has virucide and cytostatic activity, and may have a use as a vaccine. The complex is useful for identifying agents for treating or preventing a conditions involving altered level of the complex, e.g. human papilloma virus (HPV) infection, or cancer. The compositions, antibodies, vectors and methods are useful for treating such diseases. The sequences shown in ADF09584-ADF09697 represent cDNA's of the
                                                                                                                                                                                                                                                                                                              Virucide; cytostatic; anti-HIV; dermatological; small interfering RNA; selective post-translational silencing; siRNA; oncogene; genital wart; human papilloma virus; HPV gene; cancer; human cervical cancer; HIV; smallpox; flu; common cold; cervical cancer; penile cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New purified complex comprising a first polypeptide and a second polypeptide, useful for identifying agents for treating/preventing a condition involving altered level of the complex e.g. human papilloma virus infection, or cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      E6 siRNA sequence.
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     17-JUL-2001; 2001GB-00017358
                                                           17-JUL-2002; 2002WO-GB003300.
                                                                                                                                                                            WO2003008573-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAL54430 standard; DNA; 477
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 3; SEQ ID NO 108; 156pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14-FEB-2002; 2002US-0356911P
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                                                                                                                                                                                                                           Human papilloma virus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO2003068940-A2
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HOFFMANN LA ROCHE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
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                                                                                                                                                                                                                                                                                   squamous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ooi CE,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                   cell
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                                                                                                                                                                                                                                                                                      carcinoma;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         103 G; 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
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                                                                                                                                                                                                                                                                                   al cancer; penile cancer;
verruca vulgaris; gene t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         T; 0
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RESULT 17
RAL54445/c
ID AAL544
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AC AAL544
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DT 03-APR
XX
Uruci
KW Viruci
KW Select
KW Select
KW Human
KW malign
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PN WO2003
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PI 17-JUI
PR 11-JAN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to a novel method for selective post-translational CC silencing in a mammalian cell of the expression of an exogenous gene of cviral origin. The method comprises introducing into the cell a small CC interfering RNA (siRNA) construct that is homologous to a part of the CC mRNA sequence of the gene. The method is useful for the selective post-cc transcriptional silencing of an exogenous gene of viral origin (e.g. an CC concepte or human papilloms virus (HPV) gene) in a mammalian cell. The CC method or the siRNA is particularly useful for treating cancer, human cc cervical cancer, human immunodeficiency virus (HIV), smallpox, flu, CC common cold, or a disease caused by a HPV (e.g. genital warte, cervical CC vulgaris). An siRNA construct or vector is useful for use as a medicament CC for the diseases mentioned. The polynucleotide sequence of the invention CC can be used to treat disorders by gene therapy. This polynucleotide correction con control to the control of the invention CC can be used to treat disorders by gene therapy. This polynucleotide sequence of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of the invention control of t
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Best Local :
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                                                                            17-JUL-2001; 2001GB-00017358.
14-JAN-2002; 2002GB-00000688.
17-JUN-2002; 2002GB-00013855.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HPV16 B6 siRNA derived DNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         03-APR-2003
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                                                                                                                                                                              17-JUL-2002; 2002WO-GB003300.
                                                                                                                                                                                                                                                                                                                                                                                          malignant squamous cell carcinoma; verruca vulgaris;
                                                                                                                                                                                                                                                                                     WO2003008573-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Fig 1A; 44pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-221850/21.
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17-JUN-2002; 2002GB-00013855.
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Similarity 100.0%; Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                338
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                                                                                                                                                                                                                                                                                                                                                                                             gene therapy; ds
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(MILN/) MILNER · A

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RESULT 18
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Matches 21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Selective post-transcriptional silencing of an exogenous viral gene (e.g. human papilloma virus (HPV) E6), for treating e.g. cancer, comprises using a small interfering RNA (siRNA) construct homologous to an mRNA of
                                             exogenous immortalizing gene and and typical glandular epithelial reproduction.
                                                               Immortalized endometrial glandular epithelial cell strain containing exogenous immortalizing gene and maintains properties of non-cancer and typical glandular epithelial cells, useful in field of research and typical glandular epithelial cells, useful in field of research and typical glandular epithelial cells, useful in field of research and typical glandular epithelial cells, useful in field of research and typical glandular epithelial cells, useful in field of research and typical glandular epithelial cells.
                                                                                                                                                                                                                           31-JUL-2003; 2003JP-00283911
                                                                                                                                                                                                                                                            31-JUL-2003, 2003JP-00283911.
                                                                                                                                                                                                                                                                                                                                 JP2005046117-A.
                                                                                                                                                                                                                                                                                                                                                                    Human
                                                                                                                                                                                                                                                                                                                                                                                                   cancer; neoplasm;
                                                                                                                                                                                                                                                                                                                                                                                                                       cell culture;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human papillomavirus type 16 E6 wild-type gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADX26908 standard; DNA; 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 11; Fig 11; 44pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Milner AJ;
                                                                                                                                        WPI; 2005-175815/19.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    358
                                                                                                                                                                                                                                                                                                                                                                  papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21;
                                                                                                                                                                       UNIV KANAZAWA TLO YG.
KOKURITSU GAN CENT SOCHO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP; 167 A; 75 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first
                                                                                                                                                                                                                                                                                                                                                                                                                       immortalization;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          entry)
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         104 G; 131 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                   Gynecology and obstetrics;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 477;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                     Andrology;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
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                                                                 cell
of
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The invention relates to a novel immortalized endometrial glandular epithelial cell strain in which an exogenous immortalizing gene is introduced and the properties of the cell line as non-cancer typical glandular epithelial cells, are maintained. The cell line of the invention may be useful for research of reproduction, particularly for analyzing the adhesion of the fertilized egg during implantation, analyzing the effect of steroid hormones, analyzing the mechanism of multistep canceration of the inner glandular epithelial membrane by genetic engineering of the cell line which is otherwise non-cancerous, and analyzing the effect of carcinogenic substances on the cell line. To cell line maintains the properties of normal somatic cells and the properties of endometrial glandular epithelial cells. The current sequence is that of the Human papillomavirus type 16 E6 wild-type gene the invention.
invention.
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Query Match
Best Local :
                                   Matches
                                                                       Sequence 477
358
              1 CAGGACACAGTGGCTTTTGAC 21
                                21;
                                            Similarity
CAGGACACAGTGGCTTTTGAC 338
                                   Conservative
                                                                       BP; 167
                                           100.0%;
                                                                      A; 76 C;
                                  0
                                           Score 21; DB
Pred. No. 1.7;
                                                                       103 G;
                                   Mismatches
                                                                      131 T;
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                                                    Length 477;
                                                                       0 Other;
                                   Indels
                                   0
                                   Gaps
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11-AUG-2005
                                  AEA51113
                                                                AEA51113 standard; DNA; 477
(first entry)
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RESULT 19
ARASILI3/c
ID ARASILI
XX ARASILI
XX ARASILI
XX Delive
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XX Human papillomavirus. injury; infection; cancer; gastrointestinal disease; gyneocology and obstetrics; tumor; colorectal tumor; Delivery mechanism; Human papillomavirus type 16 E6/E7 uterine cervix tumor; gene gene therapy; cytostatic; vulnerary; virucide; squamous cell carcinoma; neoplasm; gene fragment, SEQ ID E7 gene, ds; NO: 17.

09-JUN-2005

25-NOV-2004; 2004WO-GB004979.

25-NOV-2003; 2003GB-00027409 05-MAR-2004; 2004US-0549919P

(MILN/) MILNER AJ.

2005-405310/41.

Composition useful for delivering an agent into a cell comprises the agent, a transfer agent and a solid or colloidal carrier medium.

Disclosure; SEQ ID NO 17; 56pp; English.

The present invention relates to a method and composition comprising a transfer agent and a solid or colloidal carrier medium for delivering biological agents into cells. The invention is useful for the treatment of cancer, tumor, carcinoma of cutaneous, squamous or cervical epithelia and colorectal carcinoma, wounds, burns and scars. The invention is also useful in gene therapy. The present sequence is the human papillomavirus type 16 E6/E7 gene fragment. This sequence is useful in a method for treating carcinomas.

Claim 4; SEQ

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NO 3; 22pp; Japanese

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RESULT 20
AAT31834/c
ID AAT31834 standard;
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Best Local S
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11-JAN-1997
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                                                                                                                                                                                                                                                                                                                                      Human papillomavirus.
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                                                                                                                                                                                                                                                                                                                                                                        Human papilloma virus E6/E7
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                 misc_feature
                                                         misc_feature
                                                                                                                       misc_feature
                                      misc_feature
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 CAGGACACAGTGGCTTTTGAC 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGGACACAGTGGCTTTTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP; 167 A; 75 C; 104 G; 131 T; 0 U; 0 Other;
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(first entry)
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124. .126
/*tan-
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118. .120
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/transl_except= (
121. .123
           /transl_except= ,
151, .153
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/transl_except=
133. .135
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/transl_except= (
130. .132
'*tag= o
/transl_except=
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145. .147
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| 15. .117
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42. .144
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48. .150
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                                                                                                                                                                                                                                                                                                   "E6/E7 fusion protein (deletion mutant)."
                                                                                                                                                                                                                                                                                                                                                                         protein variant.
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se; vaccine;
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                                                                                                                                                                                                                                                                                                                                                    response;
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RESULT 21
ADF31984/c
ID ADF31984 standard; DNA; 543 BE
XX
AC ADF31984;
XX
DT 12-FEB-2004 (first entry)
XX
DE Human papillomavirus fusion ge
XX
be human papillomavirus; cervix c
XX
human papillomavirus; cervix c
XX
FM key
FT CDS 1.543
pr CDS 1.543
pr CDS 1.543

Human papillomavirus fusion gene encoding sequence

BP

0

human papillomavirus; cervix cancer;

Location/Qualifiers
1. .543

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                                                     Matches
                                                                              Query Match
                                                                                                                              A variant of the human papilloma virus (HPV) E6 or E7 protein which elicits a humoral and/or cellular immune response against HPV can be used in vaccines against HPV or to treat HPV infection. The variant is preferably a delection mutant comprising at least half, and preferably two terminal, or is a full length E6 or E7 protein starting from the N- or C- terminal, or is a full length E6 moiety fused to a full length E7 moiety. The variant optionally has a linkage moiety and a foreign protein or peptide which facilitates the purification of, and enhances the immunogenicity of, the fusion protein. This sequence encodes a fusion between the C-terminal end of E6 and the N-terminal end of E7. The protein is also a deletion mutant generated from the sequence described in AAT31833. (Updated on 27-AUG-2003 to correct OS field.)
                                                                                                                                                                                                                                                                                                                                         Vaccine variants of human papilloma virus antigens - contain variants of E6 and/or E7 protein, pref. deletion mutants, and are used to treat or prevent HPV infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             misc_feature
                                                                                                       Sequence 519 BP; 175 A; 92 C; 113 G; 139 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                               Example 3; Page 17; 37pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1996-309518/31.
P-PSDB; AAR97562.
                                                                                                                                                                                                                                                                                                                                                                                                                                       Edwards SJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20-DEC-1995;
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(UYQU ) UNIV QUBENSLAND.
                                                                 Local
172
                                                    21;
                          _
                                                                  Similarity
              CAGGACACAGTGGCTTTTGAC 21
CAGGACACAGTGGCTTTTGAC 152
                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                       Cox J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           94AU-00000157
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/*tag= p

/transl_except= (

157. .159
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/transl_except= .
160. .162
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                                                                  100.0%;
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                                                                               100.0%;
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                                                    0; Mismatches
                                                                  Score 21;
Pred. No.
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                                                                               DB 2;
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                                                                               Length 519
                                                    Indels
                                                     0;
                                                     Gape
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ARBSULT 22
ARAQ75470 / G
ID ARAQ75
XX ARQ75
XX ARQ75
XX ARQ75
XX 16-OC
DT 16-OC
DT 28-JU
XX HPV:
XW HPV:
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Best Local S
Matches 21
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25-MAR-2003
28-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to human papillomavirus B6/R7 fusion gene, its preparing process, the process for configuring the efficient expression carrier containing the gene and resultant expression carrier, the fusion protein prepared from the gene, and the application of the fusion gene and expression protein to medical science and medicine to treat cervix cancer are disclosed. The present sequence represents the human papillomavirus fusion gene encoding sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human papillomavirus E6/E7 fusion gene carrier and fusion protein vaccine.
                                                                                                                                                                                                                                                                                                                                                                                                                                       HPV; HPV16; E6 cervix cancer;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAQ75470 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-258260/26.
P-PSDB; ADF31985.
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                            06-MAY-1993;
                                                                                                                                                             WO9426934-A2
                                                                  06-MAY-1994;
                                                                                                                                                                                                                                                                                                                                                                                            Human
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                                                                                                                                                                                                                                                                                                                                                                                          papillomavirus; strain 16.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       encoding region.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (revised)
(revised)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2002CN-00117143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ONCOLOGY TUMOR
                                                                                                                                                                                                                                                                                                                                                                                                                                       protein; E7 protein; diagnosis; cervical dyplasia; ds.
                          93US-00058920
                                                                     94WO-US005085
                                                                                                                                                                                                       /*tag= |
/label= |
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/label= E6_encoding_region
481..570
                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                          .478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       entry)
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Pred. No.
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Matches 21
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25-MAY-2000; 2000US-0207124P.
15-JUN-2000; 2000US-0211940P.
07-JUL-2000; 2000US-0216820P.
25-JUL-2000; 2000US-0220661P.
21-DEC-2000; 2000US-0257672P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The sequences of the E6 and E7 polypeptide-encoding regions of human papillomavirus (HPV) 16 and 18 are given in AAQ75470-71 and the encoded proteins in AAR63865-66, respectively. Probes and primers based on these sequences were used for HPV infection diagnosis; expression of E6 and E7 is diagnostic for cervical cancer or pre-malignant states. (Updated on 25-MAR-2003 to correct PN field.) (Updated on 16-OCT-2003 to standardise
              The invention relates to nucleic acid markers which are overexpressed ovarian cancer cells as compared to their expression in normal (i.e. r cancerous) ovarian cells. The invention also relates to polypeptides
                                                                                                                                                                           Novel isolated nucleic acid molecules (markers) overexpressed in ovarian cancer cells as compared to their normal non-cancerous ovarian cells are used to characterize stage, grade, histological type of ovarian cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human ovarian cancer DNA marker #17388.
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P-PSDB; AAR63865.
                                                                                                                         Disclosure; SEQ ID NO 17388; 106pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 570 BP;
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ilarity 100.0%;
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Cc invention.
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Best Local S
Matches 21
Hybridisation test for human papilloma virus in cell smears - with long labelled probe specific for particular virus types,
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17-JUL-1990
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                                                                                                                                                                                                                                                                                                                               02-OCT-1987;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    end) of human papilloma virus (HPV) type
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25-MAY-2000;
15-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     typing human papilloma virus (HPV) in non-frozen cellular smears fixed to a support in absence of aldehyde-based crosslinking reagents. The assay comprises: (1) combining nucleic acid in the sample with at least one detectable probe able to hybridise with 1 or more HPV types; and (2) detecting presence or absence of hybrid complexes. Opt. several probes are used, eg one for HPV types 6 and 11, associated with benign warts, and one for types 16, 18, 31, 33 and 35, associated with cervical cancer. The assay can differentiate between HPV types. It is esp. used as a secondary test. The probes can be synthesised or cloned. (Updated on 27-AUG-2003 to correct OS field.)
The invention relates to nucleic acid markers which are overexpressed in ovarian cancer cells as compared to their expression in normal (i.e. non-cancerous) ovarian cells. The invention also relates to polypeptides encoded by the markers, antibodies that selectively bind to the polypeptides, a method of inhibiting ovarian cancer in a patient at risk of developing ovarian cancer involving inhibiting expression of a gene corresponding to a marker of the invention and a method of treating a
                                                                                                                                                          Novel isolated nucleic acid molecules (markers) overexpressed in ovarian cancer cells as compared to their normal non-cancerous ovarian cells are used to characterize stage, grade, histological type of ovarian cancer.
                                                                                                                                Disclosure;
                                                                                                                                                                                                                            WPI; 2001-611502/70.
                                                                                                                                                                                                                                                                                                                                          07-JUL-2000;
25-JUL-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                           21-MAR-2001; 2001WO-US009126.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27-SEP-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200170979-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; ovarian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human ovarian cancer DNA marker #21335.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADL63123;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     examining cervical smears
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADL63123
                                                                                                                                                                                                                                                                                           (MILL-)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     patent is for a rapid in situ hybridisation assay for detecting and ing human papilloma virus (HPV) in non-frozen cellular smears fixed to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         440
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                                                                                                                                                                                                                                                                                                                         ; 2000US-0191031P.
; 2000US-0207124P.
; 2000US-0211940P.
; 2000US-0216820P.
; 2000US-0220661P.
; 2000US-0257672P.
                                                                                                                             SEQ ID NO 21335; 106pp; English.
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                                                                                                                                                                                                                                                                                              PREDICTIVE
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                                                                                                                                                                                                                                                                                              MEDICINE INC
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RESULT 26
AAH72718
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Best Local S
Matches 21
                                                                                                                                                                                                                                                                                                                    21-DEC-1999;
14-MAR-2000;
12-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             the patient an antisense oligonucleotide complementary to a marker of the invention. The markers are useful for assessing if a patient is afflicted with ovarian cancer, which involves comparing the level of expression of a marker in a patient sample and a normal level of expression of the marker in a control non-ovarian cancer sample. A difference between the expression levels indicates ovarian cancer. The level of expression of a
New isolated nucleic acid for diagnosing and treating cervical for assessing and detecting compounds for treating the cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-DEC-2000; 2000WO-US033312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200142467-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cervical cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human cervical cancer marker nucleic acid 3992.
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                                                                                                                                                                                                           (MILL-)
                                                                                         2001-375006/39.
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                                                                                                                                                                                                                                                              2000US-0189315P.
2000US-0203791P.
2000US-0210600P.
2000US-0220114P.
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                                                                                                                                               Deeds J,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cytostatic;
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                                                                                                                                            Berger
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The present sequence encodes an E7E6 fusion protein, comprising wild type E7 and E6 polypeptides from human papillomavirus type 16 (HFV16). The specification describes human papillomavirus E6 and E7 polypeptides, where the E7 polypeptide has mutations at any one or more of the amino acids corresponding to amino acids 24, 26 or 91 of the sequence given in acids corresponding to amino acids 24, 26 or 91 of the sequence given in

no

1.

Page

73;

101pp;

English.

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RESULT 27
AD044067/c
ID AD04401
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XX B6 pro
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             rne invention relates to novel genes (AAH68727-AAH73383) associated with cervical cancer with cytostatic activity. The nucleic acids and encoded polypeptides are useful: to assess if a patient is afflicted with cervical cancer or has a pre-malignant condition; to monitor the progression of cervical cancer or a premalignant condition in a patient; and to select and/or assess the efficacy of a compound or therapy for inhibiting cervical cancer in a patient. The nucleic acids may also be useful for gene therapy
                                                                                                                                                                                                                               New polypeptide comprising human papillomavirus E6 and useful for treating or preventing human papillomavirus cancers, e.g. cervical cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human papillomavirus type 16. Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   03-OCT-2002; 2002US-0415929P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      02-OCT-2003; 2003WO-US031726.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               E6 protein; E7 protein; fusion protein;
cervical cancer; immune response; lower
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nucleotide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (AMHP ) WYETH HOLDINGS CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cancer;
                                                                                                                                                                                                                                                                                                                                                              2004-316328/29
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                                                                                                                                                                                                                                                                                                                                      ADO44066.
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                                                                                                                                                                                                                                                                                                                                                                                                                 Cassetti MC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          reproductive system cancer;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /product= "E7E6 fusion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            of an E7E6 fusion protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ВÞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 21; DB 4;
Pred. No. 1.8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   G; 208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HPV16; HPV-associated gastrointestinal tract
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          penile cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   T; 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 745;
                                                                                                                                                                                                                                                            E7 polypeptides, (HPV) -associated
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The present sequence encodes a fusion protein, comprising E6 and E7 polypeptides from human papillomavirus type 16 (HPV16). The fusion protein is designated E6E7PentM, and comprises an E6 amino terminus (where residues 63 and 106 have been replaced with glycine) and an E7 carboxy terminus (where residues 24, 26 and 91 have been replaced with glycine). E6E7PentM is representative of fusion proteins of the invention. The specification describes human papillomavirus E6 and E7 polypeptides, where the E7 polypeptide has mutations at any one or more of the amino acids corresponding to amino acids 24, 26 or 91 of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   one or more of the amino acids corresponding to amino acids 63 or 106 of there sequence given in ADO44072. The polypeptides of the invention are useful for treating or preventing human papillomavirus (HPV)-associated cancers, such as cervical cancer. The fusion proteins and nucleic acids encoding the fusion proteins are useful for generating immune responses against HPV. They are also useful for treating lower gastrointestinal tract cancers, e.g. anal cancer, and other cancers of the reproductive
                                                                                                                                                                                                                                                                                                                                                                      New polypeptide comprising human papillomavirus E6 and E7 polypeptides, useful for treating or preventing human papillomavirus (HPV)-associated cancers, e.g. cervical cancer.
                                                                                                                                                                                                                                                                                                                      Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      03-OCT-2002; 2002US-0415929P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   02-OCT-2003; 2003WO-US031726
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human papillomavirus type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          E6 protein; E7 protein; fusion protein; HPV16; HPV-associated cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15-JUL-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 747 BP; 247 A; 132 C; 166 G; 202 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             system, including penile and vulvar cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cervical cancer; immune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (AMHP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2004-316328/29.
                                                                                                                                                                                                                                                                                                                24; Page 71; 101pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 CAGGACACAGTGGCTTTTGAC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WYETH HOLDINGS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADO44064.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cassetti MC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sequence of a fusion protein designated E6E7PentM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /*tag=
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1. .747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /product= "E6E7PentM fusion protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   747
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                system cancer;
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.8;
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RESULT 29
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                                                                                                                                                                                                                                                                                                  New polypeptide comprising human papillomavirus E6 and useful for treating or preventing human papillomavirus cancers, e.g. cervical cancer.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      03-OCT-2002; 2002US-0415929P
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The present sequence encodes an E6E7 fusion protein, comprising wild type E6 and E7 polypeptides from human papillomavirus type 16 (HPV16). The specification describes human papillomavirus E6 and E7 polypeptides, where the E7 polypeptide has mutations at any one or more of the amino acids corresponding to amino acids 24, 26 or 91 of the sequence given in ADO44073 and the E6 polypeptide has no mutations or has mutations at any one or more of the amino acids corresponding to amino acids 63 or 106 of

type

sequence given in ADO44072.

The polypeptides of the

invention are

Example 1; Page 68; 101pp; English.

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The present sequence encodes a fusion protein, comprising E6 and E7 polypeptides from human papillomavirus type 16 (HPV16). The fusion protein is designated E6E7TetM, and comprises an E6 amino terminus (where residues 63 and 106 have been replaced with glycine) and an E7 carboxy terminus (where residues 24 and 26 have been replaced with glycine).

86E7TetM is representative of fusion proteins of the invention. The specification describes human papillomavirus E6 and E7 polypeptides, where the E7 polypeptide has mutations at any one or more of the amino acids 24, 26 or 91 of the sequence given in ADO44073 and the E6 polypeptide has no mutations or has mutations at any one or more of the amino acids corresponding to amino acids 27 to mutations or has mutations at any one or more of the amino acids corresponding to amino acids 30 or 106 of
                                                                                                                                                                                                                            New polypeptide comprising human papillomavirus E6 and E7 polypeptides, useful for treating or preventing human papillomavirus (HPV)-associated cancers, e.g. cervical cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   useful for treating or preventing human papillomavirus (HPV)-associated cancers, such as cervical cancer. The fusion proteins and nucleic acids encoding the fusion proteins are useful for generating immune responses against HPV. They are also useful for treating lower gastrointestinal tract cancers, e.g. anal cancer, and other cancers of the reproductive
                                                                                                                                                                                                Claim 24; Page 70; 101pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                          02-OCT-2003; 2003WO-US031726
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The present sequence encodes a fusion protein, comprising E7 and E6 polypeptides from human papillomavirus type 16 (HPV16). The fusion protein is designated E786TetM, and comprises an E7 amino terminus (where residues 24 and 26 have been replaced with glycine) and an E6 carboxy terminus (where residues 63 and 106 have been replaced with glycine). E786TetM is representative of fusion proteins of the invention. The specification describes human papillomavirus E6 and E7 polypeptides, where the E7 polypeptide has mutations at any one or more of the amino acids corresponding to amino acids 24, 26 or 91 of the sequence given in ADO44073 and the E6 polypeptide has no mutations or has mutations at any
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                                                                                                                                                                                                                                                                                                                                                                           New polypeptide comprising human papillomavirus R6 and useful for treating or preventing human papillomavirus cancers, e.g. cervical cancer.
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reproductive system cancer; penile cancer; vulvar cancer;
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The present sequence encodes a fusion protein, comprising E7 and E6 polypeptides from human papillomavirus type 16 (HPV16). The fusion protein is designated E7E6PentM, and comprises an E7 amino terminus (where residues 24, 26 and 91 have been replaced with glycine) and a carboxy terminus (where residues 63 and 106 have been replaced with glycine). E7E6PentM is representative of fusion proteins of the invention. The specification describes human papillomavirus E6 and E polypeptides, where the E7 polypeptide has mutations at any one or m of the amino acids corresponding to amino acids 24, 26 or 91 of the
                                                                                                                                                      Claim
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                                                                                                                                                                                New polypeptide comprising human papillomavirus E6 and E7 polypeptides, useful for treating or preventing human papillomavirus (HPV)-associated cancers, e.g. cervical cancer.
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                                                                                                                                                                                                                                                                                         Cassetti MC;
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                                                                                                                                                                                                               Virus-like particle vaccines containing dengue virus recombinant as core for carrier, applicable in preventives or/and remedies for the cervical cancer and viral diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ds; gene; cytostatic; virucide; dengue virus; recombinant replicon; deletion; preM protein; C protein; NS1 protein signal; vaccine; cervical cancer; viral disease; antigen; dendritic cell; immune res
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-JAN-2003; 2003CN-00115272.
30-JAN-2003; 2003CN-00115273.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-JAN-2004; 2004WO-CN000088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO2004072274-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-NOV-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADR47004;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                              GENBANK; AF486352.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (SHAN-) SHANGHAI TENGEN BIOMEDICAL (TENG-) TENGEN BIOMEDICAL CO. (BEIJ-) BBIJING ORIENTAL TENGEN TEC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sequence given in ADO44073 and the E6 polypeptide has no mutations
                                                                                                                                                                                                                                                                                                                                                        PSDB;
                                                                                                                                                                                                                                                                                                                                                     2004-625870/60.
DB; ADR47005.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         papillomavirus type 16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            papillomavirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  papillomavirus type 16 E7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 CAGGACACAGTGGCTTTTGAC 21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 standard; DNA; 768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            747 BP; 246 A; 132 C; 171 G; 198 T; 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /*tag= a
/product= "HPV-16 E7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .768
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100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TENGEN TECHNOLOGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           protein signal; vaccine;
n; dendritic cell; immune response;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 12;
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or tumors
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A dengue virus recombinant replicon has a deletion of the complete coding sequence for preM protein of dengue virus and also includes elements of e.g. the non-coding region in the whole of the 5'-end, the coding region of the front 20 amino acids in the C protein, and the coding region of NS1 protein signal; coding regions of all non-structural proteins. The

Example

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SEQ ID NO 1; 38pp; Chinese.

for

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RESULT 34
AEF40156/c
ID AEF40
XX AEF40
XX AEF40
XX AEF40
XX Vacci
KW Vacci
KW neopl
KW codin
OS Human
XX Vacci
KW Codin
OS Humar
XX Vacci
KW Codin
OS Humar
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Best Local S
Matches 21
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                                                                                                                                                                                                 WPI; 2006-109169/11.
P-PSDB; AEF40157.
GENBANK; AF486352, AF469197, AF472508.
                                                                                                                                                                                                                                                                                                                                                                                                                                30-JAN-2003; 2003CN-00115272
30-JAN-2003; 2003CN-00115273
30-JAN-2004; 2004WO-00072274
                             Example 2;
                                                                                                              New recombinant DEN replicons with a deletion of preM, useful producing a drug for the prophylaxis and treatment of cancer of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29-JUL-2005; 2005US-00192923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US2006018928-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human papillomavirus type 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Vaccine; virus-like particle; replicon; therapeutic; cancer; cytostatic; neoplasm; viral infection; virucide; infection; oncogene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human papillomavirus 16 (HPV-16) E7-E6 oncogene.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AEF40156 standard;
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                                                                                         producing infection.
                                                                                                                                                                                                                                                                                                                                                                             (PANG/)
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                             SEQ
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                                IJ
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/product= "Human papillomavirus 16 (HPV-16) E7-E6
oncoprotein"
/note= "No stop codon"
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                             24pp; English
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Best Local S
Matches 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention provides a virus-like particle (VLP) vaccine which contains dengue virus (DEN) recombinant replicon as its core. The DEN replicon contains exogenous nucleotide sequences such as human papillomavirus (HPV) antigen proteins, immune regulators or combination of HPV antigen and immune regulators. The invention is useful for producing a drug for the prophylaxis and treatment of cancer or viral infection. The present sequence is a human papillomavirus oncogene.
                                                                                                                                                                                                                                                                                                                                                                                                                 Human papillomavirus type 16
                                                                                                                                                                                                                                                                                                                                                                                                                                       Human papilloma virus; HPV; detection; cervical cancer; amplification; hybridisation; diagnosis; transformed cell; E6; E7; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 768 BP; 255 A; 139 C; 172 G; 202 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 652
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      of Human Papilloma Virus 16 (HPV 16).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (revised)
                                                                                                                                                      660. .683
                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                               /*tag= i
/note= "Primer H16-743 binding
                                                                                                                      /*tag= h
/note= "Primer BB112 binding site."
                                                                                                                                                                /*tag= g
/note= "Primer H16-686 binding site."
                                                                                                                                                                                                                    591. .621
                                                                                                                                                                                                                                                       /*tag= d
/note= "Primer BB114 binding site."
                                                                                                                                                                                                                                                                                    454. .47
                                                                                                                                                                                                                                                                                                                              /*tag= b
/note= "Primer H16-58 binding site."
                                                                                                                                                                                                                                                                                                                                                             /*tag= a
/note= "Primer BB113 binding site."
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/note= "Primer
                                                                                                                                                                                                                             'ttag= e
'note= "Primer BB111 binding site."
                                                                                                                                                                                                                                                                                               note= "Primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA;
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                                                                                                                                                                                     . 681
                                                                                                                                                                                                                                                    .503
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                                                                  "Primer H16-773 binding site."
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                632
                                                                                                                                                                                                                                                                                              BB4 binding site."
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94US-00216233.

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RESULT 36
AAX89756/c
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Best Local S
Matches 21
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05-JAN-1998;
17-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    An in situ hybridisation assay for detecting an intracellular marker of low copy number in cells comprises fixing the cells to a support using paraformaldehyde, treating the cells with a protease to permeabilise them without altering morphology; adding amplification reagents; incubating the cells at below fifty degrees celeius to perform amplification by self—sustained sequence replication; adding a labelled probe complementary to the region between the primers; washing cells to remove unhybridised probe and then detecting the labelled probe. The B6/B7 region of human papilloma virus (HPV) 16 is used especially to detect mRNA being transcribed from this region which becomes active in transformed cells. The method can be used for the early diagnosis of cervical cancer. Primers used to amplify fragments of the B6/B7 region are described in AAT14664-T14674. (Updated on 25-MAR-2003 to correct PF field.) (Updated on 27-AUG-2003 to correct OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Detection of low copy number intracellular markers - by 3SR amplification of target RNA in fixed cells then hybridisation with labelled probe, for detecting human papilloma virus in cervical cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
Human papillomavirus.
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                                                                                                                                                                                                                                                                           11-DEC-1998;
                                                                                                                                                                                                                                                                                                                              17-JUN-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             human papilloma virus; infection; gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Probe sequence for HPV 16 E6/E7.
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12-OCT-1999
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WPI; 1999-443850/37.
                                                   Lorincz
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cancer; virus; HPV; ss.
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                                                                                                           DIGENE
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(first entry)
                                                                                                                                                            97US-0069426P.
98US-0070486P.
98US-0082167P.
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RESULT 37
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Best Local
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25-MAR-2003
09-MAR-1993
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  Recombinant virus vectors encoding human papillomavirus proteins -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAQ29389;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        comparison
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                                             P-PSDB; AAR27723, AAR27724, AAR27725.
                                                                      WPI; 1992-349219/42.
                                                                                                                                                                                                    14-MAR-1991;
                                                                                                                                                                                                                                              10-MAR-1992;
                                                                                                                                                                                                                                                                                         01-OCT-1992
                                                                                                                                                                                                                                                                                                                                                                                                                       misc_feature
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                                                                                                                                                         (IMMU ) IMMUNOLOGY LTD.
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                                                                                                             Inglis SC,
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/note= "third reading frame
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Pred. No. 1
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Best Local S
Matches 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The fragment of DNA contg. the HPV-16 E6/B7 coding region was prepd. by PCR from plasmid pBR322/HPV16 (Durst et al., PNAS, 80: 3812 (1983)) using oligonucleotides SO5 and SO6. The DNA prod. has a site for Ncol at the beginning of the E6 gene and a Smal site immediately downstream of the termination codon for E7. The E6 and E7 ORPs are fused together to form a single continuous ORP via site directed mutagenesis and the immortilising potential of E7 is removed by altering two key codons of the HPV E7 sequence. The single ORF of HPV-16 E6/B7 may be inserted into vaccinia virus DNA at neutral sites (pref. by inserting two sets of the DNA in opposite orientations to overcome the problem of intertypic recombination) to make a recombinant virus vector for use immunotherapeutically to activate cells of the immune system against HPV. See also AAQ23955-400 and AAQ239450-69. (Updated on 25-MAR-2003) to correct PN field.) (Updated on 24-OCT-2003 to standardise OS field)
                                                      Vaccine variants of human papilloma virus antigens - contain variants of E6 and/or E7 protein, pref. deletion mutants, and are used to treat or prevent HPV infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  treating and vaccinating against \ensuremath{\mathsf{HPV}} infections and conditions caused them, such as cervical cancer.
  Example 1;
                                                                                                                                                                                                                                                   Edwards SJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         W09619496-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human papillomavirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         humoral immune response;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human papilloma virus E6/E7 protein variant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27-AUG-2003
10-JAN-1997
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                                                                                                                                                                                                                                                                                                            OXQU )
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                                                                                                                                                                  1996-309518/31.
DB; AAR97561.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                papilloma virus; E6; E7; deletion mutant; HPV; immune response;
                                                                                                                                                                                                                                                                                                         CSL LTD.
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Page 15-16; 37pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (revised)
(first en
                                                                                                                                                                                                                                                   Cox J,
                                                                                                                                                                                                                                                                                                         QUEENSLAND
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                                                                                                                                                                                                                                                                                                                                                                                            94AU-00000157
                                                                                                                                                                                                                                                                                                                                                                                                                                               95WO-AU000868
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/product= "E6/87 fusion protein."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
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                                                                                                                                                                                                                                                     Webb
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Pred. No. 1.9
D; Mismatches
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Matches 21
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                              AAX78791-X78801 represent nucleic acid sequences which encode novel constructs comprising an E6 or E7 protein or E6/E7 fusion protein from HPV (represented in AAY2575-Y25386). These constructs are optionally linked to an immunological fusion partner and an immunomodulatory CpG oligonucleotide. The products of the invention can be used to induce an immune response in a patient to an HPV antigen. They can also be used if preventing or treating HPV induced tumours
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fusion protein; E6 protein; E7 protein; E6/E7; immunomodulator; tumour; immunological fusion partner; CpG oligonucleotide; immune response; HPV antigen; prevention; treatment; 88.
 Sequence 822
                                                                                                                                                                                       Composition comprising an E6, induce immune response to HPV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                    WPI; 1999-405485/34.
P-PSDB; AAY25376.
                                                                                                                                                                                                                                                                                                                                              24-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                           18-DEC-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic
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                                                                                                                                                                                                                                                                                                               (SMIK ) SMITHKLINE BEECHAM BIOLOGICALS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   358 CAGGACACAGTGGCTTTTGAC 338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   papillomavirus.
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                                                                                                                                                        Page 48; 62pp; English.
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   BP;
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 277 A; 147 C; 168 G; 230 T; 0 U; 0 Other;
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Pred. No. 1.9;
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be used for
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Query Match Best Local Similarity

100.0%;

Score 21; DB Pred. No. 1.9;

2

Length 822

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RESULT 41
AED52633/c
ID AED526
XX
AC AED526
XX
AC AED526
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DT 29-DEC
XX
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AAX29781/c
ID AAX29
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                                                                                                                                                                                                                                                                 Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                  This sequence represents the coding region for a chimeric E6 or E7 protein or E6/E7 fusion protein from Human papillomavirus (HPV) linked t an immunological fusion partner, in this case, a fragment of the Haemophilus influenzae B protein D. The sequence also contains a histidine tag at the C-terminus of the encoded protein. The protein can be used in a vaccine, for immuno-therapeutically treating HPV induced tumour lesions (benign or malignant) and preventing HPV viral infection. (Updated on 17-OCT-2003 to standardise OS field)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human papillomavirus.
Haemophilus influenza
                                                                                                                                                                                                                                                                                                                    Sequence 822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Fig 3; 95pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bruck C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22-AUG-1997;
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22-JUN-1999
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                    29-DEC-2005
                                                       AED52633;
                                                                                      AED52633
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Papilloma Virus (HPV) fusion proteins - useful in nent or prophylaxis of HPV induced lesions.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   lesion;
                                                                                                                                                                                                                                                                 Similarity
                                                                                        standard;
                                                                                                                                                                           CAGGACACAGTGGCTTTTGAC
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(first entry)
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benign; malignant; virus; infection; ss
                                                                                      DNA;
                                                                                                                                                                                                                                                               100.0%;
                                                                                        822
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Pred. No.
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                                                                                                                                                                                                                                                                                 Length 822;
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 RESULT 42
AAX78795/c
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XC AAX787
XC AAX787
XC DE HPV fu
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KW Immuno
KW Immuno
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Human papillomavirus
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The invention relates to human Papilloma virus (HPV) fusion proteins, linked to an immunological fusion partner that provides T helper epitopes to the HPV antigen. Vaccine formulations comprising the fusion proteins are useful in the treatment or prophylaxis of HPV induced lesions (papillomas, warts and cervical cancer). HPV 16 (and HPV 18) R6 and E7 proteins (singly, as an E6-E7 fusion or mutatted) were fused to either Haemophilus influenzae D protein (20-127), the C-terminus of Streptococcus pneumoniae Lyth protein (CLyth) or thioredoxin. The present sequence encodes an HPV-H. influenzae D protein, fusion protein of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic. Chimeric.
Pusion protein; R6 protein; E7 protein; E6/E7; immulimmunological fusion partner; CpG oligonucleotide; HPV antigen; prevention; treatment; ss.
                                                                                                                                                  06-SEP-1999
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P-PSDB; AED52634.
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Human papillomavirus type 16.
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                                                                                                  HPV fusion protein CLYTA-E6-His/HPV16 DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
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/product= "Pusion protein D1/3-B6-His/HPV16"
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Pred. No. 1
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ds; gene; D protein.
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                                                       immunomodulator; tumour;
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RESULT 43
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AC AAX29784;
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DT 17-OCT-2003 (revise
DT 22-JUN-1999 (first
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Chimeric; B6; B7; fu
KW (Chimeric; benign; mali.
XX
Human papillomavirus
OS Streptococcus pneumo
OS Chimeric.
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PD 04-MAR-1999.
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PF 17-AUG-1998; 98WO-
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PF 17-AUG-1997; 97GB-
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PF 18-AUG-1997; 97GB-
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PF 18-CC, Cabezon Si
PI Lombardo-Bencheikh A
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DR WPI; 1999-190587/16.
DR P-PSDB; AAY02635.
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Matches 21
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                                                                                                                                                                                                                               Human papillomavirus.
Streptococcus pneumoniae.
                              WPI; 1999-190587/16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 879 BP; 289 A; 168 C; 209 G; 213 T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    preventing or treating HPV induced tumours
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example VI; Page 52; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Composition comprising induce immune response
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                                                     Lombardo-Bencheikh A;
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benign; malignant; virus;
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                                                                Silva
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                                                                 Gerard
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                      The invention relates to human Papilloma virus (HPV) fusion proteins, linked to an immunological fusion partner that provides T helper epitopes to the HPV antigen. Vaccine formulations comprising the fusion proteins are useful in the treatment or prophylaxis of HPV induced lesions (papillomas, warts and cervical cancer). HPV 16 (and HPV 18) E6 and E7
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                                                                                                                                                                                       Example 10;
                                                                                                                                                                                                                                                                                                P-PSDB; AED52642.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      protein cLytA-E6-His/HPV16,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    otein; vaccine; papilloma; cytostatic; papillomavirus infection; uterine cervix tumor; E6; ds; gene; LytA.
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                                                                                                                                                                                     Fig 10; 96pp; English
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/product= "Fusion protein cLytA-E6-His/HPV16"
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Pred. No. 1.
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The invention concerns transgenic non-human animals that express oncogenes of interest in their epithelial cells, and materials and methods for their production. Expression of the oncogenes is controlled by a sequence from the human involucrin upstream regulatory region (see AAA09476) which targets expression to desired tissues and cells (i.e. suprabasal scratified squamous epithelial tissue). The transgenic animal are useful as animal models for studying neoplastic diseases that affect epithelial tissues, such as those caused by the papillomavirus 16 oncogene E6 or E7 nucleic acid sequences and including blistering diseases (e.g. epidermolytic hyperkeratinosis, Dowling-Meara disease), proliferative diseases (e.g. psoriasis, epidermal lysis and Bulosa simplex), ichthyosis disease (e.g. chthyosis bullosa Simens and simplex).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human papillomavirus type 16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hINV; involucrin; regulatory region; tissue-specific; promoter; oncogene; suprabasal; stratified; squamous; epithelial tissue; animal model; neoplasia; papillomavirus 16; E6; E7; blistering; proliferative;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Haemophilus influenzae D protein (20-127), the C-terminus of Streptococcus pneumoniae LytA protein (cLytA) or thioredoxin. sequence encodes an HPV-LytA, fusion protein of the invention.
                                                                                                                                                                                                                                                                                                       Eckert
                                                                                                                                                                                                                                                                                                                                                             30-OCT-1998;
29-OCT-1999;
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                                                                                                                                                                                                  Disclosure; Fig 13; 86pp;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 CAGGACACAGTGGCTTTTGAC 21
                                                                                                                                                                                                                              nic animals that express oncogenes in epithelial tissue, models for neoplastic conditions such as psoriasis and
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99US-00430201
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/label= E6
628. .921
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standard; DNA; 1000

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Best Local S
Matches 21
                                                                                                                                                                                                                                                                                                                                The present invention relates to an alphavirus vector system comprising nucleic acid derived from a human papilloma virus (HPV). The invention cells containing it, are used in treatment and prevention of cervical cancer, particularly as a vaccine. By selecting the nucleic acid that encode E6/E7 proteins without ability to bind to pRb and p53, the risk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  colon, cervix and liver. candidate agents for the (claimed)
                                                                                                                                                                                                                                                    that cells infected with the alphavirus vector system may be oncogenic is avoided (contrast use of other viral vectors). sequence is Human papillomavirus enhE6,7 constrcut DNA
                                                                                                                                                                                                      Sequence 939 BP; 284 A; 197 C; 217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New alphavirus system, useful for genetic immunization against cervical cancer, comprises papilloma virus nucleic acid.
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CAGGACACAGTGGCTTTTGAC
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ilarity 100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The animal models may also be used to screen ability to prevent or treat these diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Holtrop
                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
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Pred. No.
                                                                                                                          Score 21;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           486
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  502
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                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ŗ
                                                                                                                                                                                                      G; 241 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    G; 249 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Daemen CAHH;
                                                                                                                            1.9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.9;
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                                                                                                                                                     DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
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                                                                                                                                                  Length 939;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HPV; cervical cancer;
                                                                                                                                                                                                        0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
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                                                                                                    Indels
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                                                                                                    Gaps
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RESULT 48
AAN91784/c
ID AAN917
XX AAN917
AC AAN917
XX 27-AUG
DT 25-MAR
DT 16-MAR
XX DNA pr
XX Cervic
XX CHUMAN
XX WO8909
XX WO8909
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                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 21; Conserva
                                                                                         27-AUG-2003
25-MAR-2003
16-MAR-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             misc_binding
                                                                     DNA probe complementary to human papilloma virus type 16.
                                                                                                                                   AAN91784;
                                                                                                                                                      AAN91784 standard;
                                                                                                                                                                                                                                                                                        Sequence 1000 BP; 340 A; 171 C; 230 G; 259 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                           Example 4b describes the results of the amplification of HPV-16 DNA by PCR using primers. (Updated on 24-OCT-2003 to standardise OS field)
                                                                                                                                                                                                                                                                                                                                                              Detection
                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1990-156905/21.
                                                                                                                                                                                                                                                                                                                                                                                                      Cerutti P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11-NOV-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DE3838269-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 misc_binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            misc_binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human papillomavirus type 16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HPV-18; HPV-16; amplification; primer; polymerase chain reaction; PCR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HPV-16 fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24-OCT-2003
21-APR-1994
           WO8909940-A.
                             Human papillomavirus
                                                   Cervical cancer.
                                                                                                                                                                                                                                                                                                                                         Example 4b; Page 4; llpp; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                              11-NOV-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-MAY-1990.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAQ08627;
                                                                                                                                                                                                                                                                                                                                                                                                                          (BEHW ) BEHRINGWERKE
                                                                                                                                                                                                          440 CAGGACACAGTGGCTTTTGAC 420
                                                                                                                                                                                                                      1 CAGGACACAGTGGCTTTTGAC 21
                                                                                                                                                                                                                                                                                                                                                             of human papilloma virus -
                                                                                                                                                                                                                                                                                                                                                                                                      Whitcomb J, Zijlstra J,
                                                                                                                                                                                                                                                 Conservative
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(first en
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(first entry)
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/note= "primer (AAQ08629) binding site"
588. .677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /*tag= a
/note= "primer (AAQ08628) binding site"
601. .620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /*tag= c
/note= "primer (AAQ08630) binding site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                      DNA; 1005 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 entry)
                                                                                                                                                                                                                                               100.0%; Score 21;
100.0%; Pred. No.
tive 0; Mismatch
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                               type 16
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RESULT 49
AAX78793/c
ID AAX78793/s
AAX78793/c
AAX78793;
XX AAX78793;
XX O6-SEP-1999 (first entry)
DT O6-SEP-1999 (first entry)
XX HPV fusion protein; E6 protein; E7
KW Fusion protein; E6 protein; E7
KW HPV antigen; prevention; treatm
XX Synthetic.
OS Human papillomavirus.
XX W09933868-A2.
XX W09933868-A2.
XX W09933868-A2.
XX W7 D8-JUL-1999.
XX W7 D8-JUL-1999; 98WO-EP008563.
XX PP 18-DEC-1997; 97GB-00027262.
XX C (SMIK ) SMITHKLINE BEECHAM BIOL
XX Jalemans WLJ, Gerard CMG;
XX WPI; 1999-405485/34.
PR P-PSDB; AAY25377.
XX Composition comprising an E6, E
PT induce immune response to HPV.
XX Composition comprising an E6, E
PT induce immune response to HPV.
XX Example III; Page 49; 62pp; Eng
XX Constructs comprising an E6 or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
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Best Local S
Matches 21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    obtd. by cutting HPV16 with BamHI and PvuII. The patent describes probes (DNA or RNA) and their complements capable of detecting one or a combination of HPV types 6, 11, 16, 18, 31, 33 and 35. (Updated on 25-MAR -2003 to correct PR field.) (Updated on 27-AUG-2003 to correct OS field.)
                                                  Example III; Page 49; 62pp; English.
                                                                                    Composition comprising an E6, E7 or E6/E7 induce immune response to HPV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Fusion protein; E6 protein; E7 protein; E6/E7; immunomodulator; tum immunological fusion partner; CpG oligonucleotide; immune response;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HPV fusion protein D1/3-E6E7-His/HPV16 DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rapid detection of specific human papilloma virus genotypes - by hybridisation of DNA digest with new labelled nucleic acid probes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1989-324314/44.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           George AL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-APR-1988;
31-MAR-1989;
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                                                                                                                                                                                                                          (SMIK ) SMITHKLINE BEECHAM BIOLOGICALS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (ONCO-) ONCOR INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    892 CAGGACACAGTGGCTTTTGAC 872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       40; Page 46; 81pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 CAGGACACAGTGGCTTTTGAC 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity 100.
21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Groff DE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            88US-00177404.
89US-00330381.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 21; DB 1; 100.0%; Pred. No. 1.9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  treatment; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
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                                                                                                     fusion
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                                                                                                     protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                       from HPV to
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AAX78791-X78801 represent nucleic acid sequences which encode novel constructs comprising an E6 or E7 protein or E6/E7 fusion protein f

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RESULT 50
AAX29782/c
ID AAX29782 standard; DNA; 1116 BP.
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Best Local S
Matches 21
                                           Matches
                                                           Query Match
Best Local S
                                                                                                                            This sequence represents the coding region for a chimeric E6 or E7 protein or E6/E7 fusion protein from Human papillomavirus (HPV) linked to protein immunological fusion partner, in this case, a fragment of the Haemophilus influenzae B protein D. The sequence also contains a histidine tag at the C-terminus of the encoded protein. The protein can be used in a vaccine, for immuno-therapeutically treating HPV induced tumour lesions (benign or malignant) and preventing HPV viral infection. (Updated on 17-OCT-2003 to standardise OS field)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HPV (represented in AAY25375-Y25386). These constructs are optionally linked to an immunological fusion partner and an immunomodulatory CpG oligonucleotide. The products of the invention can be used to induce an immune response in a patient to an HPV antigen. They can also be used for preventing or treating HPV induced tumours
                                                                                                                                                                                                                                                                                        Human Papilloma Virus (HPV) fusion proteins - useful in vaccines for treatment or prophylaxis of HPV induced lesions.
                                                                                                                                                                                                                                                                                                                                                                                Bruck C, Cabezon Silva T, Lombardo-Bencheikh A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-MAR-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chimeric; E6; E7; fusion protein; protein D; vaccine; immunotherapy; tumour; lesion; benign; malignant; virus; infection; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1116 BP; 368 A; 208 C; 235 G; 305 T; 0 U; 0 Other;
                                                                                                  Sequence 1116 BP; 368 A; 208 C; 235 G; 305 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                              Disclosure; Fig 6; 95pp; English.
                                                                                                                                                                                                                                                                                                                                    P-PSDB; AAY02633.
                                                                                                                                                                                                                                                                                                                                                    WPI; 1999-190587/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       22-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chimeric.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human papillomavirus.
Haemophilus influenzae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Prot.D1/3-E6-E7-His/HPV16 coding sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-OCT-2003
22-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAX29782;
                                                                                                                                                                                                                                                                                                                                                                                                                          (SMIK ) SMITHKLINE BEECHAM BIOLOGICALS.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 CAGGACACAGTGGCTTTTGAC 21
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                                                           Similarity
CAGGACACAGTGGCTTTTGAC 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGGACACAGTGGCTTTTGAC 656
                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                       97GB-00017953.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98WO-EP005285.
                                        100.0%; Sc
100.0%; Pr
%ative 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                               Delisse AEF,
                                                         Score 21; D
Pred. No. 2;
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                                             Mismatches
                                                                       DB 2;
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                                                                                                                                                                                                                                                                                                                                                                                               Gerard CMG;
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                                                                       Length 1116;
                                             Indels
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                                           Gaps
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Db 676 CAGGACACAGTGGCTTTTGAC 656
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Search completed: May 24, 2006, 05:56:59 Job time : 256.028 secs

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                                                                                                                                                                                                                                                                                                                                                                                       Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B B
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    nucleic search, using
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length: 2000000000
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Match
    48236798 seqs, 27959665780 residues
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Faculty of Agricultural, Food and Environmental Quality Sciences, The Hebrew University of Jerusalem P.O. Box 12, Rehovot, 76100, Israel Tel: 972 8 9489 683 Fax: 972 8 9489 683 Fax: 972 8 9489 683 Email: shaham@agri.huji.ac.il Seq primer: T3 forward. Seq primer: T3 forward Location/Qualifiers 1244 /mol type="mRNA" /mol type="mRNA" /strain="Fragrant Cloud" /db_xref="taxon:128735"	Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons; rosids; eurosids I; Rosales; Rosaceae; Rosoideae; Rosa.  REFERENCE 1 (bases 1 to 244)  AUTHORS Guterman,I., Shalit,M., Menda,N., Piestun,D., Dafny-Yelin,M., Shalev,G., Bar,E., Davydov,O., Ovadis,M., Emanuel,M., Wang,J., Adam,Z., Pichersky,R., Lewinsohn,E., Zamir,D., Vainstein,A. and Weiss,D.  TITLE Rose Scent: Genomics Approach to Discovering Novel Floral Fragrance-Related Genes  JOURNAL Plant Cell 14 (10), 2325-2338 (2002)  COMMENT Contact: Naama Menda Petal Genomics	RESULT 1 BQ106475/c LOCUS BQ106475 BC10102.e Rose Petals (Fragrant Cloud) Lambda Zap Express Library ROSA hybrid cultivar cDNA clone fc2102.e 5', mRNA sequence.  VERSION BQ106475 BQ106475.1 GI:20156137 KEYWORDS CRGANISM ROSA hybrid cultivar ORGANISM ROSA hybrid cultivar ELUKARYOCLE, Viridiplantae, Streptophyta, Embryophyta; Tracheophyta;	75.2 411 2 75.2 412 1 75.2 413 3 75.2 413 3 75.2 415 3 75.2 416 3 75.2 416 1 75.2 416 1 75.2 416 1 75.2 416 1 75.2 417 7 75.2 418 11 75.2 424 1 75.2 424 1	969 15.8 75.2 384 11 BH366210 970 15.8 75.2 386 11 B90843 971 15.8 75.2 386 7 AU900115 972 15.8 75.2 389 1 AL100673 973 15.8 75.2 391 3 BU733286 974 15.8 75.2 391 7 AV665451 975 15.8 75.2 391 7 BZ938673 976 15.8 75.2 398 2 BI473695 977 15.8 75.2 398 11 B69790 977 15.8 75.2 399 11 B69790 979 15.8 75.2 399 11 B34265 979 15.8 75.2 403 11 B34265 980 15.8 75.2 403 11 B34265 981 15.8 75.2 404 8 BZ279842 982 15.8 75.2 404 8 BZ279842 983 15.8 75.2 406 2 BM228285 984 15.8 75.2 406 1 AL458745 985 15.8 75.2 406 2 BM228285
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                                                     Laboratory for Genome Exploration Research Group, Sciences Center (GSC), Yokohama Institute The Institute of Physical and Chemical Research (1977-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa Tel: 81-45-503-9222
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                                                                                                                                                                                                           RIKEN Mouse ESTs (Konno,H., et al.)
Unpublished (2000)
Contact: Yoshihide Hayashizaki
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BB264006.1 GI:8960462
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genome-res@gsc.riken.jp,
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[note="5lte 1: Sall; Site 2: BamHI; cDNA library was prepared and sequenced in Mouse Genome Encyclopedia project of Genome Exploration Research Group in Riken Genomic Science Exploration Research in Riken RIKEN. Division of Experimental Animal Research in Riken contributed to prepare mouse tissues. 1st strand cDNA was primed with a primer [5]

GAGAGAGAGAGAGAGCTCTTTTTTTTTTTTTVN 3'], cDNA was GAGAGAGAGAGAGAGCTCTTTTTTTTTTTTTTVN 3'], cDNA was
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           prepared by using trehalose thermo-activated reverse transcriptase and subsequently enriched for full-lend
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/clone="B830014D01"
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| lab_host="DH10B"
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Pred. No. 6.6e+02;
   URL:http://genome.gsc.riken.jp/
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                                                                                          Kanagawa
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RESULT 3 BB264006 LOCUS

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Matches

ACCESSION VERSION

KEYWORDS

ORGANISM

REFERENCE AUTHORS

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JOURNAL COMMENT

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Thermostabilization and thermoactivation of thermolabile enzymes by trehalose and its application for the synthesis of full length cDNA. Proc. Natl. Acad. Sci. U.S.A. 95 (2), 520-524 (1998) Itoh,M., Kitsunai,T., Akiyama,J., Shibata,K., Izawa,M., Kawai,J., Tomaru,Y., Carninci,P., Shibata,Y., Ozawa,Y., Muramatsu,M., Okazaki,Y. and Hayashizaki,Y.
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Konno, H., Aizawa, K., Akahira, S., Akiyama, J., Arakawa, T., Ayatsu, N., Carninci, P., Endo, T., Fukuda, S., Fukunishi, Y., Hara, A., Hayatsu, N., Hirozane, T., Hori, F., Ishi, Y., Ishikawa, J., Ishikawa, T., Itoh, M., Izawa, M., Kadota, K., Kagawa, I., Kai, C., Kawai, J., Kikuchi, N.,
                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eut
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
Sciurognathi; Muroidea; Muridae; Murinae; Mus.
                                                                                                                                                                                  Mus musculus (house mouse)
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Carninci, P. and Hayashizaki, V.
High-efficiency full-length CDNA cloning. Methods Enzymol. 303,
                                                                                                                                                                                                                                                      BB347346.1 GI:9059174
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGGACACAGTGGCTTTTGAC 21
                                                                                       (bases 1 to 291)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          contributed to prepare mouse tissues. 1st strand cDNA was primed with a primer [5', GAGAGAGAGAGAACCAAGAGCTCTTTTTTTTTTTTTTTVN 3'], cDNA was
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          clone_lib="RIKEN full-length enriched, 10 days neonate"
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| lab_host="DH10B"
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'db_xref="taxon:10090"
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Pred. No. 6.8e+02;
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cerebellum Mus
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Itoh, M., Kitsunai, T., Akiyama, J., Shibata, K., Izawa, M., Kawai, Tomaru, Y., Carninci, P., Shibata, Y., Ozawa, Y., Muramatsu, M., Okazaki, Y. and Hayvashizaki, Y.
Automated filtration-based high-throughput plasmid preparation system. Genome Res. 9 (5), 463-470 (1999)
Carninci, P. and Hayvashizaki, Y.
High-efficiency full-length cDNA cloning. Methods Enzymol. 303, 19-44 (1999)
Please visit our web site (http://genome.rtc.riken.go.jp) for further derivate.
2 AGGACACAGTGGCTTTTGAC 21
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Kusakabe, M., Matsuyama, T., Miki, R., Mizuno, Y., Nakamura, M., Oda, H.,
Okazaki, Y., Ono, T., Owa, C., Saito, H., Sakai, C., Sato, K.,
Shibata, K., Shibata, Y., Shigemoto, Y., Shinagawa, A., Shiraki, T.,
Sogabe, Y., Sugahara, Y., Suzuki, H., Tagawa, A.,
Takahashi, F., Tominaga, N., Toya, T., Tsunoda, Y., Watahiki, A.,
Watanabe, S., Yamamura, T., Yamanaka, I., Yano, R., Yasunishi, A.,
Yoshia, T., Yoshida, K., Yoshiki, A., Yoshino, M., Muramatsu, M. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Email: genome-resegsc.riken.jp, URL:http://genome.gsc.riken.jp/Carninci,P., Nishiyama,Y., Westover,A., Itoh,M., Nagaoka,S., Sasaki,N., Okazaki,Y., Muramateu,M. and Hayashizaki,Y. Thermostabilization and thermoactivation of thermolabile enzymes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center(GSC), Yokohama Institute
The Institute of Physical and Chemical Research (RIKEN)
1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan
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Unpublished (2000)
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Fax: 81-45-503-9216
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/strain="C57BL/6J"
/db_xref="taxon:10090"
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| lab_host="DH10B"
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                                                                                                              87.6%;
95.0%;
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                                                                                                              Score 18.4; DB 7;
Pred. No. 6.8e+02;
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This is the 5' sequence of the clone insert Clone from S. Wiemann,
Molecular Genome Analysis, German Cancer Research Center (DKFZ);
Email s. wiemann@dkfz-heidelberg.de; sequenced by GBF (National
Research Centre for Biotechnology Ltd., Braunschweig/Germany)
within the cDNA sequencing consortium of the German Genome Project.
This clone (DKFZp459A2414) is available at the RZDP in Barlin.
Please contact the RZPD: Ressourcenzentrum, Heubnerweg 6, 14059
Berlin-Charlottenburg, GERMANY; Email: clone@rzpd.de Further
information about the clone and the sequencing project is available
at http://mips.gsf.de/projects/cdna/.
                                                                                                                                                                                                                                   pas14546
                 Hominidae; Homo.

1 (bases 1 to 546)

Kimura, K., Wakamatsu, A., Suyamashita, R., Yamamoto, J.,
                                                                                         Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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Bloecker, H., Boecher, M., Brandt, P., Mewes, H.W., Weil, B., Amid, C., Osanger, A., Fobo, G., Han, M. and Wiemann, S.
Pongo pygmaeus mRNA (Bloecker, H., Boecher, M., Brandt, P., et al.)
Unpublished (2004)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DKFZp459A2414_r1 459 (synonym: DKFZp459A2414_5', mRNA sequence
                                                                                                                                                                                             DA514546.1
EST.
                                                                                                                                                                                                                                                                           DA514546

DA514546 FEBRA2 Homo sapiens cDNA clone FEBRA2002360 5', mRNA
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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                                                                                                                                                                     Homo sapiens (human)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /clone="PKFZp459A2414"
/tlssue_type="cortex"
/dev_stage="adult"
/lab_host="DH10B"
/clone_lib="459 (synonym: pcorl)"
/note="Vector: pSportl_Sfi; Site_1: SfilA; Site_2:
Sugiyama, T., Saito, K., Isono, Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Pongo pygmaeus"
/mol_type="mRNA"
/db_xref="taxon:9600"
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95.0%;
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Suzuki,Y., Ota,T., Nishikawa,T.,
., Sekine,M., Tsuritani,K., Wakaguri,H.,
aito.K.. Isono,Y., Irie,R., Kushida,N.,
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RESULT 7
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                                                                                                                                                                                                 Hominidae; Homo.

1 (bases 1 to 549)

1 (bases 1 to 549)

Kimura, K., Wakamateu, A., Sekine, M., Tsuritani, K., Wakaguri, H., Yamashita, R., Yamamoto, J., Sekine, M., Tsuritani, K., Wakaguri, H., Yamashita, R., Yamamoto, K., Isono, Y., Irie, R., Kushida, N., Yamamoto, T., Saito, K., Isono, Y., Trie, R., Kushida, N., Yokoi, T., Xondo, H., Wagatsuma, M., Yonoyama, T., Otsuka, R., Kanda, K., Yokoi, T., Xondo, H., Wagatsuma, M., Murakawa, K., Ishida, S., Ishibashi, T., Takahashi-Fujii, A., Murakawa, K., Ishida, S., Ishibashi, T., Takahashi-Fujii, A., Murakawa, K., Ishida, S., Ishibashi, T., Takahashi-Fujii, A., Diversification of Transerriptional Modulation: Large-scale Identification and Characterization of Putative Alternative
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NEDO human cDNA project (New Energy and Industrial Technology
Developmental Organization, Japan); cDNA library construction:
Helix Research Institute (HRI); 5'-end one pass sequencing: HRI,
Research Association for Biotechnology (RAB) and Biotechnology
Center, National Institute of Technology and Evaluation; 3'-end one
pass sequencing: RAB.
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Fax: 81-438-52-3986
2-6-7 Kazusa-Kamatari,
Tel: 81-438-52-3975
                                                FLJ Project (HRI Team)
Helix Research Institute
                                                                                                                                                    Promoters of Human Genes
Genome Res. 16 (1), 55-65 (2006)
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
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                                                                                                Contact: Takao Isogai
                                                                                                                                 16344560
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/mol_type="mRNA"
/db_xref="taxon:9606"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /clone_lib="FEBRA2"
/note="Vector: pME18SFL3"
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/dev_stage="fetal"
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Pred. No. 7.5e+02;
                        Kisarazu,
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                        Chiba, 292-0818, Japan
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AUTHORS
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1 (bases 1 to 583)

Kimura, K., Wakamatsu, A., Suzuki, Y., Ota, T., Nishikawa, T.,

Yamashita, R., Yamamoto, J., Sekine, M., Tsuritani, K., Wakaguri, H.,

Ishii, S., Sugiyama, T., Saito, K., Isono, Y., Irie, R., Kushida, N.,

Yoneyama, T., Otsuka, R., Kanda, K., Yokoi, T., Kondo, H., Wagatsuma, M.,

Murakawa, K., Ishidad, S., Ishibashi, T., Takahashi-Fujii, A.,

Tanase, T., Nagai, K., Kikuchi, H., Nakai, K., Isogai, T. and Sugano, S.

Diversification of Transcriptional Modulation: Large-scale

Identification and Characterization of Putative Alternative

Promoters of Human Genes

Promoters of Human Genes
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DA906377
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                                                                                                                                       Email: £1]-cdna@nifty.com

Email: £1]-cdna@nifty.com

Email: £1]-cdna@nifty.com

MEDO human cDNA project (New Energy and Industrial Technology

Developmental Organization, Japan); cDNA library construction:

Developmental Organization; Japan); cDNA library construction:

Helix Research Institute (HRI); 5'-end one pass sequencing: HRI,

Research Association for Biotechnology (RAB) and Biotechnology

Research Association for Biotechnology and Evaluation; 3'-end one
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                                                                                                                                                                                                                                                                                                 Tel: 81-438-52-3975
Fax: 81-438-52-3986
                                                                                                                                                                                                                                                                                                                                              Helix Research Institute
2-6-7 Kazusa-Kamatari, Kisarazu, Chiba, 292-0818, Japan
                                                                                                                                                                                                                                                                                                                                                                                                                               Contact: Takao Isogai
                                                                                                                                                                                                                                                                                                                                                                                                                                                         16344560
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                                                                                                                          Center, National Institute of Technology pass sequencing: RAB.
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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SKNMC2 Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /cell_type="teratocarcinoma"
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                                                                                                   ocation/Qualifiers
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95.0%;
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Pred. No. 7.
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Arakawa,T., Carninci,P., Fukuda,S., Furuno,M., Hanagaki,T.,

Hara,A., Hiramoto,K., Hori,F., Ishi,Y., Ito,M., Kawai,J.,

Konno,H., Kouda,M., Koya,S., Matsuyama,T., Miyazaki,A., Nomura,K.,

Ohno,M., Okazaki,Y., Okido,T., Saito,R., Sakai,C., Sakai,K.,

Sano,H., Sasaki,D., Shibata,K., Shinagawa,A., Shiraki,T.,

Sogabe,Y., Suzuki,H., Tagami,M., Tagawa,A., Takahashi,F.,

Takeda,Y., Tanaka,T., Toya,T., Muramatsu,M. and Hayashizaki,Y.

RIKEN Mouse ESTs (Arakawa,T., et al. 2001)

Onpublished (2001)
                                                                                                                                                                                                       Kondo, S., Fukunishi, Y., Shibata, K., Itoh, M., Carninci, P., Sugahara, Y. and Hayashizaki, Y.

Sugahara, Y. and Hayashizaki, Y.

Computer-based methods for the mouse full-length cDNA
cncyclopedia: real-time sequence clustering for construction of a
nonredundant cDNA library. Genome Res. 11 (2), 281-289 (2001)

Kondo, S., Shinagawa, A., Saito, T., Kiyosawa, H., Yamanaka, I.,

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Alzawa, K., Fukuda, S., Hara, A., Itoh, M., Kawai, J., Shibata, K. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Email: genome-res@gsc.riken.jp, URL:http://genome.gsc.riken.jp/Carninci,P., Shibata,K., Hayatsu,N., Sugahara,Y., Shibata,K., Itch,M., Konno,H., Okazaki,Y., Muramatsu,M. and Hayashizaki,Y. Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes. Genome Res. 10 (10), 1617-1630 (2000) wagi,K., Fujiwake,S., Inoue,K., Togawa,Y., Izawa,M., Ohara,E., Watshiki,M., Yoneda,Y., Ishikawa,T., Ozawa,K., Tanaka,T., Matsuura,S., Kawai,J., Okazaki,Y., Muramatsu,M., Inoue,Y., Kira,A., and Hayashizaki,Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center(GSC), Yokohama Institute
The Institute of Physical and Chemical Research (RIKEN)
1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BB647218 RIKEN full-length enriched, 10 days neon musculus cDNA clone B930077M09 5', mRNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                   RIKEN integrated sequence analysis (RISA) system--384-format sequencing pipeline with 384 multicapillary sequencer. Genome 10 (11), 1757-1771 (2000)
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Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
Sciurognathi; Muroidea; Muridae; Murinae; Mus.
                                                              further details
                                                                                        Computational Analysis of Full-Length Mouse cDNAs Compared with Human Genome Sequences. Mamm. Genome. 12, 673-677 (2001)
Please visit our web site (http://genome.gsc.riken.go.jp) for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Yoshihide Hayashizaki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mus musculus (house mouse)
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                                mouse
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                                tissues.
Location/Qualifiers
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/note="Vector: pME18SFL3"
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95.0%;
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Pred. No. 7.5e+02;
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d, 10 days neonate cerebellum Mus
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                                 FEATURES
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                                                                                                                                                                                                 Construction, Sequencing of the B73 Maize Genome Unpublished (2005)
                                                                                                                                                                                                                                                                                          Zea mays
Zea mays

Rubaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Sukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD

clade; Panicoideae; Andropogoneae; Zea.
                                                                                                                                                                                                                                                                                                                                                                                    survey sequence.
CZ303586
CZ303586.1 GI:6
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                                                                                          190 Frelinghuysen Road,
Tel: 732 445 3801
Fax: 732 445 5735
                                                                                                                                                                                                                                                              1 (bases I to 654)
Bharti, A.K., Nelson
                                                                                                                                                                                                                                                                                                                                                                                                                                      CZ303586
ZMMBF0080F02r ZMMBF
                                             Seq primer: Fos R
Class: fosmid ends
                                                                                                                                                       Dr. Joachim Messing's lab
The Plant Genome Initiative
                                                                                                                                                                                    Contact: Bharti, A.K.
                                                                                                                                                                                                                                                and Messing, J.
                                                                          Email: bharti@waksman.rutgers.edu
                                                                                                                                          University
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nilarity 95.0%;
Conservative
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Genomic Sciences Center and Genome Science Laboratory in
RIKEN. Division of Experimental Animal Research in Riken
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /clone lib="RIKEN full-length enriched, cerebellum"
organism="Zea mays"
                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mol_type="mRNA"
strain="C57BL/6J"
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'lab_host="DH10B"
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                 . 654
                                                                                                                                                                                                                                                              Nelson, A.B.,
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Pred. No. 7.6e+02
); Mismatches
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ic clone
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                                                                                                                          08854, USA
                                                                                                                                                         Waksman Institute,
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3', genomic
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ACCESSION
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CD353955
LOCUS
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AUTHORS
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                                                     720 bp mRNA linear UI-M-GMO-cga-j-04-0-UI.rl NIH_BMAP_GMO Mus musculus IMAGE:30360123 5', mRNA sequence.
                                                                                                                                                                                                           1 CAGGACACAGTGGCTTTTGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Email: tshini@genes.nig.ac.jp
When you want to obtain this EST clone, please send an e-mail to
Nori Satoh (satoh@ascidian.zool.kyoto-u.ac.jp) and its cc to Yuta
Satou (yutaka@ascidian.zool.kyoto-u.ac.jp).
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Center For Genetic Resource Information
National Institute of Genetics
1111 Yata, Mishima, Shizuoka 411-8540, Japan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gyoja, R., Satou, Y. and Satoh, N. Expressed genes in Molgula tectiformis Unpublished (2005)
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CD353955
CD353955.1 GI:31146456
EST.
Mus musculus (house mous
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Stolidobranchia; Molgulidae; Molgula.
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CJ337277.1 GI:67744326
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                                                                                                                                                                              CAGAACACAGTGGCTTTTGA 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (bases 1 to 660)
 musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      81-559-81-6855
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                                                                                                                                                                                                                                           Conservative
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                                                                                                                                                                                                                                                                                                                                                                      /organism="Molgula tectiformis"
/mol_type="mRNA"
/db_xref="taxon:30286"
/clone="mtbh004d21"
                                                                                                                                                                                                                                                                                                                       /tissue_type="whole animal"
/dev_stage="embryo just before hatching"
/clone_lib="Molgula tectiformis unpublished cDNA library"
                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          note="Vector: pEpiFOS-5; Site_1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="genomic DNA"
/cultivar="B73"
/db_xref="taxon:4577"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            'Clone="ZMMBF0080F02"
'lab_host="EPI100-T1"
                                                                                                                                                                                                                                                          95.0%;
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                                                                                                                                                                                                                                                        Score 18.4; DB 5;
Pred. No. 7.7e+02;
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Pred. No. 7.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 13;
                                                                                                                                                                                                                                                                        Length 660;
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                                                                               EST 15-JUL-2003
CDNA clone
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RESULT 13
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ORGANISM
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VERSION
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19;
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleosto Mammalla; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae; Pan.

1 (bases 1 to 2148)
Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Perriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J.,
                                                                                                                                                                                                                                                                                       genomic survey sequence.
AY406159
AY406159.1 GI:39762133
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Tissue Procurement: Dr. Jim Lin, University of Iowa
CDNA Library preparation: Dr. M. Bento Soares, University of Iowa
cDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa
DNA Sequencing by: Dr. M. Bento Soares, University of Iowa
Clone Distribution: Distribution information can be found at
http://genome.ulowa.edu/distribution/mousefl.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 (bases 1 to 720)
NIH-MGC http://mgc.nci.nih.gov/.
Mational Institutes of Health, Mammalian Gene Collection
                                                                                                                                                                                                  Pan troglodytes (chimpanzee)
Pan troglodytes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eut
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
Sciurognathi; Muroidea; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus
                                                                                                                                                                                                                                                                                                                                                                   Pan troglodytes CDH8 gene, VIRTUAL
                                                                                                                                                                                                                                                                                                                                                                                                     AY406159
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Seq primer: pYX-5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGGACACAGAGGCTTTTGAC 514
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /tissue type="whole brain"
/dev stage="1, 5 and 15 days newborn"
/lab_host="DH108 (TI phage resistant)"
/clone lib="NIH BMAP GM0"
/clone lib="NIH BMAP GM0"
/note="Organ: Brain; Vector: pYX- Asc; Site_1: EcoR I;
Site_2: Not I; The library was constructed according
Sonaldo, Lennon and Soares, Genome Research, 6:791-806,
1996. Denatured RNA was size fractionated on a 1% agarose
gel.First strand cDNA synthesis was primed with oligo-dr
primer containing a Not I site.Double strand cDNA was size
selected according to mRNA size fraction, ligated with EcoR
I adaptor, digested with NotI and then cloned
directionally into pYX-Asc vector. The library tag
sequence located between the Not I site and the polyA tail
is CGAACTGAAT. This library was created for the University
lowa Brain Anatomy Project (BMAP): 'Gene Discovery in the
Developing Mouse Nervous System', supported by National
Institute of Mental Health (NIMH), Hemin Chin, Ph.D.,
program coordinator."
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/mol_type="mRNA"
/strain="C57BL/6"
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'clone="IMAGE:30360123"
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95.0%;
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                                                                                                                                                 ata; Euteleostomi;
Catarrhini;
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GSS 15-DEC-2003

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Gaps

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                                                                                                                                                                                                                                                                                                                                                1 (bases 1 to 2400)
Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M.
Inferring nonneutral evolution from human-chimp-mouse orthologous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens CDH8 gene,
genomic survey sequence.
AY406158
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Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M. Direct Submission
Submitted (16-NOV-2003) Celera Genomics, 45 West Gude Drive, Rockville, MD 20850, USA
This sequence was made by sequencing genomic exons and ordering
                                                                                                                                                                                                                                                                                                          gene trios
Science 302 (5652), 1960-1963 (2003)
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                                                                                                                                                           Direct Submission
Submitted (16-NOV-2003) Celera Genomics,
Rockville, MD 20850, USA
                                                                                                                                                                                                           Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M.
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Science 30
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Inferring nonneutral evolution from human-chimp-mouse orthologous
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
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Similarity 95.0%;
19; Conservative
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                                                                                                                     sequence was made by sequencing based on alignment.
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                           /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                      Location/Qualifiers
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/gene="CDH8"
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/db_xref="taxon:9598"
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Pred. No. 9.1e+02;
0; Mismatches 1;
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                                                                                                                                                                           45 West Gude Drive,
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                                                                                                                                                                                                                                                                Kejariwal, A.,
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19; Conser
                                                   sequence.
AK139334
AK139334.1 GI:74228151
HTC; CAP trapper.
Mus musculus (house mou
                                                                                AK139334 2711 bp mRNA linear HTC 21-SEP-2005
Mus musculus 10 days neonate cortex cDNA, RIKEN full-length
enriched library, clone:A830013L24 product:cadherin 8, full insert
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Direct Submission
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Mus musculus CDH8 gene,
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/mol_type="genomic DNA"
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Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
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Science 309 16141073

Wallestedt,C.

Wallestedt,C.

RIKEN Genome Exploration Research Group

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Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs
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                                                                                                                       The transcriptional landscape of the mammalian genome Science 309 (5740), 1559-1563 (2005)
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3161 bp mRNA linear HTC 02-SEP-200
Mus musculus 10 days neonate cortex cDNA, RIKEN full-length
enriched library, clone:A830083P13 product:cadherin 8, full insert
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Submitted (30-MAR-2004) Yoshihide Hayashizaki, The Institute of Submitted (30-MAR-2004) Yoshihide Hayashizaki, The Institute of Physical and Chemical Research (RIKEN), Institute for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa, 230-0045, Japan (E-mail:genome-res@gsc.riken.jp, WRL:http://genome.gsc.riken.jp/, Tel:81-45-503-9222,
                                                                                                                                                                                                                                                                                                                             sequence.
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AK044046.1 GI:26336131
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Please visit our web site for further details.
URL:http://genome.gsc.riken.jp/
URL:http://fantom.gsc.riken.jp/.
Location/Qualifiers
   Carninci, P. and High-efficiency
                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
Sciurognathi; Muroidea; Muridae; Murinae; Mus.
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cDNA library was prepared and sequenced in Mouse Genome
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GVIRLKKPLDFETKKSYTLKVEKANIHIDSRFSSEGFFKDTATVKIVVEDADESPPFS
SPTYLLEVHENAALNSTIGQVTARDDDITSSFIRFSIDFHTDLERQFNINADDGKITL
ATPLDEELSVHINITIATEIRHSQLSRVPVAIKVLDVNDNAPEFASSYEAFLCENG
KPGQVIQTVSAMDKDDPKNGHFFLYSLLPEMVNNPNFTIKKNEDNSLSILAKHNGFNR
QKQEVYLLPIVISDSGNPPLSSTSTLTIRVCGCSNDGVVQSCNVEAYVLPIGLSMGAL
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GB|AK083092, evidence:
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                                                                                                                                                                                                                                                                                                                                                            Submitted (16-JUL-2001) Yoshihide Hayashizaki, The Institute of Physical and Chemical Research (RIKEN), Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa, 230-0045, Japan (E-mail:genome-res@gsc.riken.jp, URL:http://genome.gsc.riken.jp/, Tel:81-45-503-9222, Fax:81-45-503-9216)
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The Transcriptional Landscape of the Mammalian Genome Science 309, 1559-1563 (2005)
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Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs
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                                                                                                                                               prepare mouse tissues.
Please visit our web site for further details
                                                                                                                                                                                                                                                      Encyclopedia Project of Genome Exploration Research Group Genomic Sciences Center and Genome Science Laboratory in F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Science 309, 1564-1566 (2005)
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                                                                    URL:http://genome.gsc.riken.jp/
URL:http://fantom.gsc.riken.jp/.
                                                                                                                                                                                                                Division of Experimental Animal Research in Riken
                                                                                                                                                                                                                                                                                                                             cDNA library was prepared and sequenced in Mouse Genome
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                                                                                 Carninci,P., Shibata,Y., Hayatsu,N., Sugahara,Y., Shibata,K., Itoh,M., Konno,H., Okazaki,Y., Muramatsu,M. and Hayashizaki,Y. Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genome Res. 10 (10), 1617-1630 (2000)
                                                                                                                                                                                                                                                                                                               Carninci, P. and Hayashizaki, Y.
High-efficiency full-length cDNA cloning
Meth. Enzymol. 303, 19-44 (1999)
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Mus musculus (house mouse)
Shibata, K.,
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//db_xref="q1:26336132"
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//translation="mperlaktimdlwtpliimitlpscvytapmyQahvLttcspl/translation="mperlaktimdlwtpliimitlpscvytapmyQahvLttcspl/translation="mperlaktimdlwtpliimitlpscytytileggproteingtileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsileggpyfsi
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/db_xref="taxon:10090"
/clone="A830083P13"
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/strain="C57BL/6J"
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3B|NM_007667, evidence: BLASTN, 99%, match=2357)
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/clone_lib="RIKEN full-length enriched mouse cDNA library"
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Itoh, M., Aizawa, K.,
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Nagaoka, S.,
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Sasaki, N.,
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   Carminci, P.,
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Adachi, J., Aizawa, K., Akimura, T., Arakawa, T., Bono, H., Carninci, P., Fikuda, S., Furuno, M., Hanagaki, T., Hara, A., Hashizume, W., Hayashida, K., Hayatsu, N., Hiramoto, K., Hiraoka, T., Hirozane, T., Hayashida, K., Hayatsu, N., Hiramoto, K., Hiraoka, T., Kasukawa, T., Katch, H., Kawai, J., Kojima, Y., Kondo, S., Konno, H., Kouda, M., Koya, S., Kurihara, C., Matsuyama, T., Miyazaki, A., Murata, M., Nakamura, M., Nishi, K., Nomura, K., Numazaki, R., Ohno, M., Ohsato, N., Ohazaki, Y., Saito, R., Saitoh, H., Sakai, K., Sakazume, N., Ohazaki, Y., Saski, D., Saitoh, H., Sakai, C., Sakai, K., Sakazume, N., Sano, H., Sasaki, D., Shibata, K., Shinagawa, A., Shiraki, T., Sogabe, Y., Tangami, M., Tagawa, A., Takahashi, F., Takaku-Akahira, S., Takeda, Y., Tanaka, T., Tomaru, A., Toya, T., Yasunishi, A., Muramatsu, M. and Hayashizaki, Y. Direct Submission

Al. Submitted (16-Apr.-2002) Yoshinide Hayashizaki, The Institute of Physical and Chemical Research (RIKEN), Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute; 1-7-22 Suchitro-cho, Tsurumi-ku, Yokohama, Kanagawa, 230-0045, Japan (E-mail:genome-res@gsc.riken.jp, URL:http://genome.gsc.riken.jp/, Tel:81-45-503-9222,
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(Genome Network Core Team) and the FANTOM Consortium.
Antisense Transcription in the Mammalian Transcriptome
Science 309, 1564-1566 (2005)
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Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Division of Experimental Animal Research in Riken contributed to prepare mouse tissues. Please visit our web site for further details. URL:http://genome.gsc.riken.jp/URL:http://fantom.gsc.riken.jp/.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Laboratory in RIKEN.
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/tissue_type="hippocampus"
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/dev_stage="adult"
558._.2708
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/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                         'sex="male"
                                                                                                                                                                                                                     /clone="C630002D14"
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Nature
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Carninci, P., Shibata, Y., Hayatsu, N., Sugahara, Y., Shibata, K., Itoh, M., Konno, H., Okazaki, Y., Muztu, M. and Kayashizaki, Y. Normalization and subtraction of cap-trapper-selected cDNas to prepare full-length cDNa libraries for rapid discovery of new genes genome Res. 10 (10), 1617-1630 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Carninci,P. and Hayashizaki,Y.
High-efficiency full-length cDNA cloning
Meth. Enzymol. 303, 19-44 (1999)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi; Muroidea; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mus musculus (house mouse)
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HTC; CAP trapper.
                                                                                              Functional annotation of a
                                                                                                                                           FANTOM Consortium.
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                                                                                                                                                                                        RIKEN Genome
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//db xref="GI:26350237"
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IAILACIILLLVIVULFVTLRHKNEPLIIKDDEDVRENIIRYDDEGGGEEDTEAFDI
                                                          409, 685-690
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GB|NM_007667, evidence: BLASTN, 99%, match=2320)
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95.0%;
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Pred. No. 9.8e
0; Mismatches
                                                                                          full-length mouse cDNA collection
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9.8e+02;
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REFERENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Submitted (16-APR-2002) Yoshihide Hayashizaki, The Institute of physical and Chemical Research (RIKEN), Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute; 1-7-22 Sushiro-cho, Tsurumi-ku, Yokohama, Kanagawa, 230-0045, Japan (E-mail:genome-res@gsc.riken.jp, URL:http://genome-gsc.riken.jp/, Tel:81-45-503-9222,
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The Transcriptional Landscape of the Mammalian Genome Science 309, 1559-1563 (2005)

8 (bases 1 to 3793)

9 (bases 1 to 3793)

Adachi J., Alzawa, K., Akimura, T., Arakawa, T., Bono, H., Carninci, Fukuda, S., Furuno, M., Hanagaki, T., Hara, A., Hashizume, W., Fukuda, S., Furuno, M., Hanagaki, T., Hara, A., Histozana, T., Hayashida, K., Hayashida,
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Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs
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URL:http://fantom.gsc.riken.jp/.
Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              prepare mouse tissues.
Please visit our web site for further details.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (Genome Network Core Team) and the FANTOM Consortium. Antisense Transcription in the Mammalian Transcriptome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The FANTOM Consortium, the RIKEN Genome Exploration Research Group
/dev_stage="15 days embryo"
560 2710
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(MGD|MGI:107434, evidence: Direct assignmer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              organism="Mus musculus"
/mol_type="mRNA"
/strain="C57BL/6J"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     tissue type="head"
clone_Tib="RIKEN full-length enriched mouse cDNA library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        db_xref="FANTOM_DB:D930046N17"
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SOURCE ORGANISM VERSION KEYWORDS

DEFINITION POCUS AK086711 RESULT 19

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BG022939/c
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Best Local Similarity
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                                                              19,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Clone distribution: Xenopus clones from this library are available through the I.M.A.G.E. Consortium/LLNL at: info@image.llnl.gov Trace considered overall poor quality
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Contact: Sandy Clifton, Ph.D.
WashU Xenopus EST project, 1999
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Clifton, S., Johnson, S.L., Blumberg, B., Song, J., Hillier, L., Pape, D., Martin, J., Wylie, T., Underwood, K., Theising, B., Bowers, Y., Person, B., Gibbons, M., Harvey, N., Ritter, E., Jackson, Y., McCann, R., Waterston, R. and Wilson, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BG022939 337 bp mRNA linear EST 24-JAN-2001 daa81d07.x1 Cho Li treated gastrula Xenopus laevis cDNA clone IMAGE:4083876 3' similar to TR:Q92688 Q92688 PHAPI2A PROTEIN ;,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Email: est@watson.wustl.edu
Library constructed by C. Hashimoto, Ph.D. in the laboratory
Cho, Ph.D. DNA Sequencing by: Washington University Genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequencing Center
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Unpublished (1999)
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1 (bases 1 to 337)
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Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Xenopus laevis (African clawed frog)
Xenopus laevis
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CAGGACACAGTGGCTTTTGAC 21
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                                                              Conservative
                                                                                                                                                       /clone lib="Cho Li treated gastrula"
/note="Vector: pBluescript KS+; Site 1: NotI; Site 2:
/note="Vector: pBluescript KS+; Site 1 - oligo(dT)
BCORI; 1st strand was primed with a Not I - oligo(dT)
primer, double-stranded cDNA was cloned into the Not I and
BCO RI sites of pBluescript KS+. Library was constructed
by C. Hashimoto, Ph.D., in the laboratory of K. Cho, Ph.D.
(Department of Developmental and Cell Biology, University
of California, Irvine)."
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ATLQNPDGINGFLPRWGLPTQRWEERNAIQTGCV"
                                                                                                                                                                                                                                                                                                                        /clone="IMAGE:4083876"
/tissue_type="gastrula, Li-treated"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Xenopus laevis"
/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                 _xref="taxon:8355"
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90.5%;
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Pred. No. 9.8e+02;
                                                                               Score 17.8;
Pred. No. 1.
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                                                                               DB 2;
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                                                                                                Length 337;
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                                                              Indels
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BF771220/c
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CR555978 377 bp ml DKFZp469I192 r1 469 (synonym: pkid1) DKFZp469I192-5', mRNA sequence. CR555978 CR555978.1 GI:50249580 EST.
                                                                                                                                                                                                                                                                                                                   1 CAGGACACAGTGGCTTTTGAC 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tel: +55-11-27074922
Fax: +55-11-2707001
Email: asimpson@ludwig.org.br
Email: asimpson@ludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome
Project. This entry can be seen in the following URL
(http://www.ludwig.org.br/scripts/gethtml2.pl?tl=IL5&t2=IL5-IT0027-
2711100-285-d06&t3=2000-11-27&t4=1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hominidae; Homo.

1 (bases 1 to 357)

1 (bases 1 to 357)

Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R.,
Dias Neto,E., Garcia Correa,R., Zago,M.A., Bordin,S., Costa,F.F.,
Nagai,M.A., da Silva,W. Jr., Zago,M.A., Baia,G.S., Simpson,D.H.,
Boldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,
Brunstein,A., deoliveira,P.S., Bucher,P., Jongeneel,C.V.,
O'Hare,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     High quality sequence stop: 302.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sequence tags
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Simpson, A.J.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Contact: Simpson A.J.G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
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                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note=Torgan: epid tumor; Vector: puc18; Site 1: Smal; Site 2: Smal; A mini-library was made by cloning products derived from ORBSTES PCR (U.S. Letters Patent application No. 196,716 - Ludwig Institute for Cancer Research) profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/dev_stage="Adult"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  low stringency conditions."
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Pred. No. 1.4e+03;
0; Mismatches 2
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                                                                                                         WA linear
Pongo pygmaeus
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AUTHORS
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           Okazaki, Y., Furuno, M., Kasukawa, T., Adachi, J., Bono, H., Kondo, S., Nikaido, I., Osato, N., Saito, R., Suzuki, H., Yamanaka, I., Kiyosawa, H., Yagi, K., Tomaru, Y., Hasegawa, Y., Nogami, A., Schonbach, C., Gojobori, T., Baldarelli, R., Hill, D.P., Bult, C., Schonbach, C., Gojobori, T., Baldarelli, R., Hill, D.P., Bult, C., Schonbach, C., Gojobori, T., Baldarelli, R., Hardt, D., Brusic, V., Batalov, S., Beisel, K.W., Blake, J.A., Bradt, D., Brusic, V., Chothia, C., Corbani, L.E., Cousins, S., Dalla, E., Dragani, T.A., Fletcher, C.F., Forrest, A., Frazer, K.S., Gaasterland, T., Gariboldi, M., Gissi, C., Godzik, A., Gough, J., Grimmond, S., Gastincich, S., Hirokawa, N., Jackson, Jarvis, E.D., Kanai, A., Kawaji, H., Kawasawa, Y., Kedzierski, R.M., King, B.L., Konagaya, A., Kawaji, H., Kawasawa, Y., Kedzierski, R.M., King, B.L., Konagaya, A., Kurochkin, I.V., Lee, Y., Lenhard, B., Lyons, P.A., Maglott, D.R., Waltais, L., Marchionni, L., McKenzie, L., Miki, H., Nagashima, T., Namana, Y., Vald, T., Daven, W.T., Dortea, G., Decola, G., Waltais, L., Marchionni, L., McKenzie, L., Miki, H., Nagashima, T., Namana, Y., Vald, T., Waltais, L., Marchionni, L., McKenzie, L., Miki, H., Nagashima, T., Namana, Y., Vald, T., Waltais, L., Marchionni, L., McKenzie, L., Miki, H., Nagashima, T., Namana, Y., Vald, T., Waltais, L., McKenzie, L., M
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus
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Berlin-Charlottenburg, GERMANY; Email: clone@rzpd.de Further
information about the clone and the sequencing project is available
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bloecker,H., Boecher,M., Brandt,P., Mewes,H.W., Weil,B., Osanger,A., Fobo,G., Han,M. and Wiemann,S. Pongo pygmaeus mRNA (Bloecker,H., Boecher,M., Brandt,P., Unpublished (2004)
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    Location/Qualifiers
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1 (bases 1 to 377)
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/clone="pKr2p4691192"
/tissue_type="kidney"
/dey_stage="adult"
/lab_host="pH10B"
/clone_lib="469 (synonym: pkid1)"
/note="Wector: pSport1_Sfi; Site_1: Sf
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Alzawa,K., Akimura,T., Arakawa,T., Carninci,P., Fukuda,S.,
Hirozane,T., Imotani,K., Ishii,Y., Itoh,M., Kawai,J., Konno,H.,
Miyazaki,A., Murata,M., Nakamura,M., Nomura,K., Numazaki,R.,
Ohno,M., Sakai,K., Sakazume,N., Sasaki,D., Sato,K., Shibata,K.,
Shiraki,T., Tagami,M., Waki,K., Watahiki,A., Muramatsu,M. and
Hayashizaki,Y. Direct Submission
Computational Analysis of Full-Length Mouse cDNAs Compared with
Human Genome Sequences Mamm. Genome. 12, 673-677 (2001)
Normalization and subtraction of cap-trapper-selected cDNAs to
prepare full-length cDNA libraries for rapid discovery of new
genes. Genome Res. 10 (10), 1617-1630 (2000)
RIKEN integrated sequence analysis (RISA) system-384 format
sequencing pipeline with 384 multicapillary sequencer. Genome Res.
10 (11), 1757-1771 (2000)
1 CAGGACACAGTGGCTTTTGAC 21
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The Institute of Physical and Chemical Research (RIKEN)
1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Jag
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Institutes of Health (NIH) Building: 49, Room 4A82 49 Convent Dri
MSC 4472 Bethesda, Maryland U.S.A) whose assistance we gratefully
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Cells were provided by Drs. William J Pavan, Stacie Loftus, and
Denise Larson (Division of Intramural Research Genetic Disease
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Fax: 81-45-503-9216
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Contact: Yoshihide Hayashizaki
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                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Mus musculus"
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/clone_lib="RIKEN full-length enriched, melanocyte"
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AL785427.2 GI:38308397
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19;
            Xenopus tropicalis

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;

Xenopodinae; Xenopus; Silurana.

1 (bases 1 to 594)

Croning,M.D.R., Ashurst,J.L., Taylor,R., Zorn,A.M. and Rogers,J.

Sanger Xenopus tropicalis EST project 2001 (11_2003)

Unpublished (2003)

On Jun 25, 2002 this sequence version replaced gi:21571131.

Contact: Taylor R

Contact: Taylor R

Contact: Taylor R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hinxton, Cambridgeshire, CB10 1SA, UK
Email: trop@sanger.ac.uk
Sanger Xenopus tropicalis EST project 2001
TROPICALIS_SEQUENCE_ID: TTDA075007.plkSP6
This sequence is from a Xenopus Gene Collection (XGC) library
constructed by Nigel Garrett.
Seq primer: SP6.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
Xenopodinae; Xenopus; Silurana.
1 (bases 1 to 507)
1 (bases 1 to 507)
1 Croning, M.D.R., Ashurst, J.L., Taylor, R., Garrett, N. and Rogers, J. Sanger Xenopus tropicalis EST project 2001 (2004)
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CR429603.1 GI:48923012
EST.
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Contact: Croning MDR
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Cambridgeshire, CB10 1SA, UK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /dev_stage="tailbud (stage 28-30)"
/lab_host="Escherichia coli DH108."
/clome libe_"XGC-tailbud"
/note="Vector: pCS107; Site_1: EcoRI; Site_2: NotI; cDNA
was oligo dT primed from Sug of poly A+ RNA from tailbud.
EcoRI-NotI cut cDNA was then ligated into pCS107 with
EcoRI at the 5' end and NotI at the 3' end."
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/clone="TTbA075007"
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Pred. No. 1.
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RESULT 26
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CDNA was oligo dT primed from Sug of poly A+ RNA from neu EcoRI-NotI cut cDNA was then ligated into pCS107 with Ecc 5, end and NotI at the 3, end.

Vector: pCS107; Site 1: EcoRI; Site 2: NotI Host: Escherichia coli DH10B

Sanger Xenopus tropicalis EST project 2001

TROPICALIS SEQUENCE ID: TNeu072e23.plcSP6

Sequencing primer: SP6.

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                      Unpublished (2004)
On Jan 6, 2005 this sequence version rep
Other ESTS: JGI XZC15551.rev
Contact: LindquIst,E.A., Richardson,P.
DOE Joint Genome Institute
2800 Mitchell Drive, Walnut Creek, CA 94
Tel: 925 296 5600
Fax: 925 296 5710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    426
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1 (bases 1 to 595)

Richardson, P., Lucas, S., Rokhsar, D., Detter, J.C., Ng, D.C., Brokstein, P. and Lindquist, E.A.
                                            http://image.llnl.gov
Naming Conventions: EST name is generated by the concatenation of
the JGI Clone Id and the direction of sequencing. The suffix '.fwd'
                                                                                                                                              Email: cdna@jgl-psf.org
Tissue Procurement: Richard M. Harland Laboratory, University of
Tissue Procurement: Richard M. Harland Laboratory, University
California, Berkeley: http://tropicalis.berkeley.edu/home
cDNA Library Preparation: Richard M. Harland Laboratory, University
of California, Berkeley
DNA Sequencing: DDE Joint Genome Institute: http://www.jgi.doe.gov
Clone Distribution: I.M.A.G.B. Consortium/LLNL:
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JGI XZG15551.fwd NIH XGC tropGas7
IMAGE: 7531609 5', mRNA sequence.
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indicates a forward sequencing read of the insert. necessarily reflect the orientation of the insert. Plate: XZG 0161 row: n column: 23
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DOE Joint Genome Institute Xenopus tropicalis EST project
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/lab host="Bscherichia coli DH10B"
/lab host="Bscherichia coli DH10B"
/clone lib="XGC-neurula"
/note="Vector: pCS107; Site_1: EcoRI; Site_2: NotI; cDNA
was oligo dT primed from 5ug of poly A+ RNA from neurula.
EcoRI-NotI cut cDNA was then ligated into pCS107 with
EcoRI at the 5' end and NotI at the 3' end."
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/mol type="mRNA"
/db xref="taxon:8364"
/clone="TNeu072e23"
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RESULT 28
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                                                                                                                                                                                                                                                                                                                             This sequence was generated from the {\it T7} end of BAC 5G15. 5G15 is part of the Daniokey BAC Library created by R. Plasterk and N.V. Keygene.
                                                                                                                                                                                                                                                                                                                                                                          Direct Submission
Submitted (06-UTW-2002) The Sanger Institute, I
Campus, Hinxton, Cambridgeshire, CB10 1SA, UK.
humquery@sanger.ac.uk Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes; Cyprinidae; Danio.

1 (bases 1 to 626)

1 (humphray, S. J., Huckle, E. and Hunt, S. E.
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AL733484
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/note="Vector: pCS108; Site 1: SalI; Site 2: NotI;
/note="Vector: pCS108; Site 1: SalI; Site 2: NotI;
/gastrula library constructed by Russell B. Fletcher in R.
Harland's lab using poly A RNA and oligo dT primers
(Invitrogen Superscript Plasmid System for cDNA Synthesis
and Cloning). SalI (5' end) -NotI (3' end) cDNA was
inserted into vector pCS108
(http://mcb.berkeley.edu/labs/harland/pages/plasmids.html)
                                                                                                                                                                                   /clone="DKEY-5G15"
/tissue_type="Testis"
/note="vector pIndigoBAC-536"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /tissue_type="whole embryo"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="mRNA"
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/clone="IMAGE:7531609"
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/mol_type="genomic DNA"
/db_xref="taxon:7955"
                                                                                                                                                                                                                                                                                                 ocation/Qualifiers
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Pred. No. 1.5e
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Pred. No. 1.5e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Stratagene
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                                                                                                                                                                                                                                                                                                RESULT 29
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                                                           AUTHORS
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Best Local Similarity
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                                                                                                                                                                                                                                mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
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Venter, J.C.

Venter, J.C.

Use of BAC End Sequences from CalTech Libraries for Sequence-Ready
Map Building
Unpublished (1997)

Other GSSs: CITBI-E1-2653J24.TF

Contact: Shaying Zhao, William Nierman, Mark Adams

Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Dr., Rockville, MD 20850

Tel: 301 838 0208

Tex: 301 838 0208
                Xenopodinae, Xenopus, Silurana.

1 (bases 1 to 649)

1 (croning, M.D.R., Ashurst, J.L., Taylor, R., Zorn, A.M. and Rogers, J. Sanger Xenopus tropicalis EST project 2001 (11_2003)

Unpublished (2003)

On Nov 7, 2001 this sequence version replaced gi:16794540.

Contact: Huckle E
                                                                                                                                                                          Xenopus tropicalis (western clawed frog)
Xenopus tropicalis
Eukaryota, Metazoa; Chordata; Craniata; Verrebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 CAGGACACAGTGGCTTTTGAC 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Clones are available from Research Genetics (info@resgen.com). BAC end search page: http://www.tigr.org/tdb/humgen/bac_end_search/bac_end_search.html. Seq primer: M13 Reverse Class: BAC ends.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hominidae; Homo.

1 (Dases 1 to 643)
Zhao,S., Adams,M.D., Nierman,W., Malek,J., Shizuya,H., Simon,M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AQ625517 643
CITBI-E1-2653J24.TR CITBI-E1
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AL642415.2 GI:38221123
                                                                                                                                                                                                                                                                                                                                                            AL642415 XGC-neurula Xenopus
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Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AQ625517
AQ625517.1 GI:5087909
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Email: hbe@tigr.org
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
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Institute
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/clone_lib="CITBL=B1"
/clone_lib="CITBL-B1"
/note="Vector: pBeloBAC11; Site_1: EcoRI; Site_2: EcoRI;
CalTech Human BAC Library D"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
/clone="2653U24"
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Pred. No. 1.
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sapiens genomic
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2653J24,
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SOURCE
ORGANISM
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CT346911/c
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VERSION
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TITLE
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Best Local
                                        Matches
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Best Local Similarity
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                                                                                                                                                                                                                                                                                     Humphray, S.J., Plumb, R.W. and Durham, J.L.

Direct Submission

Submitted (01-NOV-2005) The Sanger Institute, Wellcome Trust Genome Submitted (01-NOV-2005) The Sanger Institute, Wellcome Trust Genome Campus, Hinxton, Cambridgeshire, CB10 1SA, UK. B-mail enquirles: humquery@sanger.ac.uk Unpublished

This sequence was generated from the T7 end of BAC 42B24. 42B24 is part of the CHORI-242 BAC Library created by P. de Jong. Further details: http://www.sanger.ac.uk/Projects/S_scrofa/.
                                        19;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This sequence is from a Kenopus Gene Collection (XGC) library constructed by Aaron M. Zorn.

CDNA was oligo dT primed from Sug of poly A+ RNA from neurula.

BCORI-NotI cut cDNA was then ligated into pCS107 with EcoRI at the 5' end and NotI at the 3' end.

Vector: pCS107; Site 1: EcoRI; Site 2: NotI
Host: Escherichia coli DH10B
Sanger Xenopus tropicalis EST project 2001
TROPICALIS_SEQUENCE ID: TNeu025k14.plkSP6
Sequencing primer: SP6.
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1 CAGGACACAGTGGCTTTTGAC 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sus scrofa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Suina; Suidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sus scrofa (pig)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hinxton,
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                                      Conservative
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                                                                                                                                      /organism="Sus scrofa"
/mol_type="genomic DNA"
/db xref="taxon:9823"
/clone="CH242-42B24"
/tissue_type="White blood cells"
/note="vector pTARBAC1.3_BamHI
sex female"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cambridgeshire, CB10 1SA, UK
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/lab_host="RsCherichia coli DH10B"
/clone lib="XGC-neurula"
/clone lib="XGC-neurula"
/note="Vector: pCS107; Site_1: EcoRI; Site_2: NotI; cDNA
/mas oligo dT primed from 5ug of poly A+ RNA from neurula.
EcoRI-NotI cut cDNA was then ligated into pCS107 with
EcoRI at the 5' end and NotI at the 3' end."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       clone="TNeu025k14"
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db_xref="taxon:8364"
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                                                                                                                                                                                                                                                                                  .683
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                                                         84.8%;
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                                                       Score 17.8;
Pred. No. 1.
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Pred. No. 1.
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CH242-42B24, genomic
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..5e+03;
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RESULT 32
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LOCUS
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JOURNAL
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Best Local
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                                                                                                                                                                                                                                                                    539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Submitted (02-AUG-2001) Asao Fujiyama, The Institute of Physical and Chemical Research (RIKEN), Genomic Sciences Center (GSC); 1-7-22 Suehiro-chou, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (E-mail:chimpbes@gsc.riken.go.jp, URL:http://hgp.gsc.riken.go.jp/, Tel:81-45-503-9170)
Clones are derived from the chimpanzee BAC library RPCI-43 This BAC end was generated during the R&D process and may have higher chance of clone tracking errors.
                                                                                                                                                                                                                                                                                                                                         19;
                                                                                                                                       AZ560569 712 bp DNA linear of RPCI-23-206G21.TJ RPCI-23 Mus musculus genomic clone RPCI-23-206G21, genomic survey sequence.
                                                                                                                                                                                                                                                                                         1 CAGGACACAGTGGCTTTTGAC 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bequence.
AG144458
AG144458.1 GI:16674136
GSS.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi; Muroidea; Muridae; Murinae; Mus.
                                                   Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 (bases 1 to 710)
Pujiyama, A., Hattori, M., Toyoda, A.,
Totoki, Y., Watanabe, H. and Sakaki, Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Fujiyama,A., Hattori,M., Toyoda,A.,
Totoki,Y., Watanabe,H. and Sakaki,Y.
BAC end sequences of Library RPCI-43
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unpublished
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                                                                                                                                                                                                                                                                                                                                         Conservative
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R.Site 1 : EcoRI
R.Site 2 : EcoRI
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                                                                                                                                                                                                                                                                                                                                                                                                                            /cell_type="lymphocytes"
/clone_lib="RPCI-43 Chimpanzee Male BAC Library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Pan troglodytes"
/mol_type="genomic DNA"
/db_xref="taxon:9598"
/clone="RP43-005H09.TJ"
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90.5%;
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                                                                                                                                                                                                                                                                                                                                                          Score 17.8;
Pred. No. 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              645
Unpublished (2004)
On Jan 5, 2005 this sequence version replaced gi:57149427
Other ESTS: JGI XZT52439.rev
Contact: LindquIst, B.A., Richardson, P.
DOE Joint Genome Institute
                                                                                                            Richardson, P., Lucas, S., Rokhsar, D., Detter, J.C., Ng, D.C. Brokstein, P. and Lindquist, E.A. DOB Joint Genome Institute Xenopus tropicalis EST project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Email: szhao@tigr.org
Clones are derived from the mouse BAC library RPCI-23. For BAC
Clones availability, please contact Pieter de Jong
library availability, please contact Pieter de Jong
(pieter@dejong.med.buffalo.edu). Clones may be purchased from
BACPAC Resources (http://bacpac.med.buffalo.edu/orderingframe.htm)
or from Resea ch Genetics (info@resgen.com). BAC end page:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Shaying Zhao
Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Dr., Rockville, MD 20850, USA
Tel: 301 838 0208
Fax: 301 838 0208
                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
Xenopodinae; Xenopus; Silurana.

1 (bases 1 to 788)
                                                                                                                                                                                                                                                                            Xenopus tropicalis (western clawed frog)
Xenopus tropicalis
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Plate: 206 row: G column: 21
Seq primer: SP6
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Other_GSSs: RPCI-23-206G21.TV
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Mouse Bac Paser,C.M.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /clone lib="RPCI-23"
/note="Organ: Kidney/Brain; Vector: pBACe3.6; Site_1:
/note="Organ: Kidney/Brain; Vector: pBACe3.6; Site_1:
EcoRI; Site_2: EcoRI; Female C57BL/6J mouse kidney and/or
brain genomic DNA was isolated and partially digested
with a combination of EcoRI and EcoRI Methylase. Size
selected DNA was cloned into the pBACe3.6 vector at the
EcoRI sites. The ligation products were transformed into
DH10B electrocompetent cells (BRL Life Technologies). "
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Mus musculus"
/mol_type="genomic DNA"
/strain="C57BL/6J"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /db_xref="taxon:10090"
/clone="RPCI-23-206G21"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            lab_host="DH108"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          84.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 17.8; DB 11; Length 712; Pred. No. 1.5e+03; 0; Mismatches 2; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                             788 bp
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                                                                                                                                                            Ng, D.C.
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CX443805/c
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                                                                                                                                                                                                                                                                                   AUTHORS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  764
                                                                                                                                                                                                                                      Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae; Xenopodinae; Xenopus; Silurana.

1 (bases 1 to 793)
Richardson, P., Lucas, S., Rokhsar, D., Detter, J.C., Ng, D.C., Brokstein, P. and Lindquist, E.A.

DOS Joint Garrage
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Email: cdna@jgi-psf.org
Tissue Procurement: Richard M. Harland Laboratory, Univer
California, Berkeley: http://tropicalis.berkeley.edu/home
                                                                                                                           Contact: Lindquist,E.A., Richardson,P.
DOE Joint Genome Institute
2800 Mitchell Drive, Walnut Creek, CA 94598,
                                                                                                                                                                                                        DOE Joint Genome Institute Xenopus Unpublished (2004)
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JGI XZG9472.fwd NIH XGC_tropGas7 Xenopus tropicalis cDNA clone
IMAGE:7526634 5', mRNA sequence.
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DNA Sequencing: DOB Joint Genome Institute: http://www.jgi.doe.gov
Clone Distribution: I.M.A.G.E. Consortium/LLNL:
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Tissue Procurement: Richard M. Harland Laboratory, University of
California, Berkeley: http://tropicalis.berkeley.edu/home
CDNA Library Preparation: Richard M. Harland Laboratory, University
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2800 Mitchell Drive, Walnut Creek, CA 94598, USA
Tel: 925 296 5600
Fax: 925 296 5710
                                                                             Tel: 925 296 5600
Fax: 925 296 5710
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CX443805.1 GI:57259637
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Location/Qualifiers
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/note="Vector: pCS108; Site_1; SalI; Site_2: NotI; Tadpole /note="Vector: pCS108; Site_1]; B. Fletcher in R. Harland's library constructed by Russell B. Fletcher in R. Harland's lab using poly A RNA and oligo dT primers (Invitrogen SuperScript Plasmid System for cDNA Synthesis and Cloning). SalI [5' end] -NotI [3' end] cDNA was inserted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     into vector pCS108
(http://mcb.berkeley.edu/labs/harland/pages/plasmids.html)
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/dev_stage="Tadpole (st. 36-41)"
/lab_host="E. coli XL1-Blue derivative, Stratagene
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/db_xref="taxon:8364"
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Pred. No. 1.5e+03;
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                             University
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Best Local :
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                                                                                         Email: cdna@jgi-psf.org
Tissue Procurement: Richard M. Harland Laboratory, University of
California, Berkeley: http://tropicalis.berkeley.edu/home
CDNA Library Preparation: Richard M. Harland Laboratory, University
of California, Berkeley
Of California, Berkeley
                                                                                                                                                                                                                                                                                                                                                                                       1 (bases 1 to 794)
Richardson, P., Lucas, S., Rokhsar, D., Detter, J.C., Ng, D.C.,
Brokstein, P. and Lindquist, E.A.
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Xenopus tropicalis
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IMAGE:7527773 5', mRNA sequence.
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                      DNA Sequencing: DOE Joint Genome Institute: http://www.jgi.doe.gov Clone Distribution: I.M.A.G.E. Consortium/LLNL: http://image.llnl.gov
                                                                                                                                                                                                                                                                  DOE Joint Genome Institute
2800 Mitchell Drive, Walnut Creek, CA 94598,
                                                                                                                                                                                                                                                                                                                  Contact: Lindquist, E.A., Richardson, P.
                                                                                                                                                                                                                                                                                                                                         Unpublished (2004)
                                                                                                                                                                                                                                                                                                                                                                   DOB Joint Genome Institute Xenopus tropicalis EST project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CX444795.1 GI:57260627
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Clone Distribution: I.M.A.G.E. Consortium/LLNL:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            xenopodinae; Xenopus; Silurana.
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/note="Vector: pCS108; Site 1: SalI; Site 2: NotI;
Gastrula library constructed by Russell B. Fletcher in R.
Harland's lab using poly A RNA and oligo dT primers
(Invitrogen SuperScript Plasmid System for cDNA Synthesis
and Cloning). SalI (5' end) -NotI (3' end) cDNA was
inserted into vector pCS108
(http://mcb.berkeley.edu/labs/harland/pages/plasmids.html)
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/dev_stage="Gastrula (st. 10
/lab_host="E. coli XL1-Blue
ElectroTen-Blue"
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/mol_type="mRNA"
/db xref="taxon:8364"
/clone="IMAGE:7526634"
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Pred. No. 1.6e+03;
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                                                                                                                                                                                                                                                                                                                     Unpublished (2004)
on Jan 6, 2005 this sequence version replace of the State of XZT35930.rev
Other_ESTS: JGI_XZT35930.rev
Contact: LindquIst,B.A., Richardson,P.
DOE Joint Genome Institute
2800 Mitchell Drive, Walnut Creek, CA 94598,
Tel: 925 296 5600
Fax: 925 296 5710
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1 (bases 1 to 796)

Richardson,P., Lucas,S., Rokhsar,D., Detter,J.C., Ng,D.C., Brokstein,P. and Lindquist,E.A.

DOB Joint Genome Institute Xenopus tropicalis EST project
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Naming Conventions: EST name is generated by the concatenation of the JGI Clone Id and the direction of sequencing. The suffix '.fwd' indicates a forward sequencing read of the insert. It does not necessarily reflect the orientation of the insert.
                                                                                                                                   cDNA Library Preparation: Richard M. Harland Laboratory, Universit of California, Berkeley DNA Sequencing: DOB Joint Genome Institute: http://www.jgi.doe.gov.Clone Distribution: I.M.A.G.E. Consortium/LLNL:
                                                                                                                                                                                                                               Email: cdna@jgi-psf.org
Tissue Procurement: Richard M. Harland Laboratory, University
California, Berkeley: http://tropicalis.berkeley.edu/home
California, Berkeley: http://tropicalis.berkeley.edu/home
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/note="Vector: pCS108; Site 1: SalI; Site 2: NotI;
Gastrula library constructed by Russell B. Fletcher in R. Harland's lab using poly A RNA and oligo dT primers (Invitrogen Superscript Plasmid System for cDNA synthesis and Cloning). SalI (5' end) -NotI (3' end) cDNA was inserted into vector pCS108 (http://mcb.berkeley.edu/labs/harland/pages/plasmids.html)
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ElectroTen-Blue"
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/tissue_type="whole embryo"
/dev_stage="Gastrula (st. 10.5-12.5)"
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/db_xref="taxon:8364"
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Pred. No. 1.6e+03;
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                                                                                                                     DNA Sequencing: DOB Joint Genome Institute: http://www.jgi.doe.gov
Clone Distribution: I.M.A.G.B. Consortium/LLNL:
http://image.llnl.gov
Naming Conventions: EST name is generated by the concatenation of
the JGI Clone Id and the direction of sequencing. The suffix '.fwd'
indicates a forward sequencing read of the insert. It does not
necessarily reflect the orientation of the insert.
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                                                                                                                                                                                                                                                                                     Email: cdna@jgi-psf.org
Tissue Procurement: Richard M. Harland Laboratory, University of
California, Berkeley: http://tropicalis.berkeley.edu/home
CDNA Library Preparation: Richard M. Harland Laboratory, University
of California, Berkeley
Den Governia, Berkeley
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1 (bases 1 to 799)
Richardson, P., Lucas, S., Rokhsar, D., Detter, J.C.,
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Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
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/note="Vector: pCS108; Site_1: SalI; Site_2: NotI; Tadpole library constructed by Russell B. Fletcher in R. Harland's lab using poly A RNA and oligo dT primers (Invitrogen SuperScript Plasmid System for cDNA Synthesis and Cloning). SalI [5' end] -NotI [3' end] cDNA was inserted
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/dev_stage="Tadpole (st. 36-41)"
/lab_host="E. coli XL1-Blue derivative,
ElecTroTen-Blue"
                                                                                Location/Qualifiers
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(http://mcb.berkeley.edu/labs/harland/pages/plasmids.html)
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/clone="IMAGE:7611970"
/mol_type="mRNA"
/db_xref="taxon:8364"
                                       organism="Xenopus tropicalis"
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90.5%;
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Pred. No. 1.6e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19;
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Email: cdna@jd:psf.org

Email: cdna@jd:psf.org

Tissue Procurement: Richard M. Harland Laboratory, University of

California, Berkeley: http://tropicalis.berkeley.edu/home

cDNA Library Preparation: Richard M. Harland Laboratory, University

of California, Berkeley

DNA Sequencing: DOE Joint Genome Institute: http://www.jgi.doe.gov

Clone Distribution: I.M.A.G.B. Consortium/LLNL:

http://image.llnl.gov

Naming Conventions: EST name is generated by the concatenation of
the JGI Clone Id and the direction of sequencing. The suffix '.fwd'
indicates a forward sequencing read of the insert. It does not
necessarily reflect the orientation of the insert.

Plate: XZT 0653 row: b column: 9

High quality sequence stop: 828.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DOB Joint Genome Institute
2800 Mitchell Drive, Walnut Creek, CA 94598,
Tel: 925 296 5600
Fax: 925 296 5710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Xenopodinae; Xenopus; Silurana.

1 (bases 1 to 829)

Richardson, P., Lucas, S., Rokhsar, D., Detter, J.C., Ng, D.C., Brokstein, P. and Lindquist, E.A.

DOE Joint Genome Institute Xenopus tropicalis EST project Unpublished (2004)

On Jan 6, 2005 this sequence version replaced gi:57187960. Other ESTs: JGI XZT62721.rev Contact: Lindquist, E.A., Richardson, P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 CAGGACACAGTGGCTTTTGAC 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Xenopus tropicalis (western clawed frog)
Xenopus tropicalis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JGI XZT62721.fwd NIH XGC tropTad5 Xenopus tropicalis INAGE:7637291 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CX407260.2 GI:74301053
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/note="Vector: pCS108; Site_1: SalI; Site_2: NotI;
/note="Vector: pCS108; Site_1: SalI; Site_2: NotI;
Gastrula library constructed by Russell B. Fletcher in R.
Harland's lab using poly A RNA and oligo dT primers
(Invitrogen SuperScript Plasmid System for cDNA Synthesis
and Cloning). SalI (5' end) -NotI (3' end) cDNA was
inserted into vector pCS108
(http://mcb.berkeley.edu/labs/harland/pages/plasmids.html)
/db_xref="taxon:8364"
/clone="IMAGE:7637291"
/tissue_type="whole embryo"
/dev_stage="Tadpole (st. 36-41)"
/lab_host="E. coli XL1-Blue derivative,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /tissue_type="whole embryo"
/dev_stage="Gastrula (st. 1:
/lab_host="E. coli XL1-Blue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /clone="IMAGE: 7524924"
                                                                                                                                                                                          organism="Xenopus tropicalis"
                                                                                                                                                                                                                                                    ocation/Qualifiers
                                                                                                                                                       mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      90.5%;
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Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
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Stratagene

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Naming Conventions: EST name is generated by the concatenation of the JGI Clone Id and the direction of sequencing. The suffix '.fwd' indicates a forward sequencing read of the insert. It does not necessarily reflect the orientation of the insert. Plate: XZTJ SB5 row: m column: 2
High quality sequence stop: 829.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                           Email: cdna@jgi-psf.org
Tissue Procurement: Richard M. Harland Laboratory, University of
California, Berkeley: http://tropicalis.berkeley.edu/home
CDNA Library Preparation: Richard M. Harland Laboratory, University
of California, Berkeley
DNA Sequencing: DOE Joint Genome Institute: http://www.jgi.doe.gov
Clone Distribution: I.M.A.G.B. Consortium/LLNL:
http://image.llnl.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        On Jan 6, 2005 this sequence version replaced gi:57176876 Other ESTS: JGT XZT56263 rev Contact: Lindquist, E.A., Richardson, P. DOE Joint Genome Institute 2800 Mitchell Drive, Walnut Creek, CA 94598, USA Tel: 925 296 5610 Fax: 925 296 5710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 CAGGACACAGTGGCTTTTGAC 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
Xenopodinae, Xenopus; Silurana.
1 (bases 1 to 850)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CX396192 850 bp mRNA linear EST 08-SEP-: JGI_XZT56263.fwd NIH_XGC_tropTad5 Xenopus tropicalis cDNA clone IMAGE:7631020 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unpublished (2004)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DOE Joint Genome Institute Kenopus tropicalis EST project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Brokstein, P. and Lindquist, E.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Richardson, P., Lucas, S., Rokhsar, D., Detter, J.C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Xenopus tropicalis (western clawed frog)
Xenopus tropicalis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CX396192.2 GI:74295269
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
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/note="Vector: pCS108; Site_1: SalI; Site_2: NotI; Tadpole library constructed by Russell B. Fletcher in R. Harland's lab using poly A RNA and oligo dT primers (Invitrogen SuperScript Plasmid System for cDNA Synthesis and Cloning). SalI [5' end) -NotI (3' end) cDNA was inserted
                                                                       ElectroTen-Blue"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              into vector pCS108 (http://mcb.berkeley.edu/labs/harland/pages/plasmids.html)
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/clone_lib="NIH_XGC_tropTad5"
/note="Vector: pCS108; Site_1: SalI; Site_2: NotI; Tadpole
library constructed by Russell B. Fletcher in R. Harland's
                                                                                        /tissue_type="whole embryo"
/dev_stage="Tadpole (st. 36-41)"
/lab_host="E. coli XL1-Blue deriv
/lab_host="E. coli XL1-Blue deriv
                                                                                                                                                               db_xref="taxon:8364"
clone="IMAGE:7631020"
                                                                                                                                                                                                                                    organism="Xenopus tropicalis"
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90.5%;
                                                                                                                                                                                                                type="mRNA"
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Pred. No. 1
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                                                                                          derivative,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9;
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                                                                                          Stratagene
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                                              RESULT 41
CX418837/c
LOCUS
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AUTHORS
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ORGANISM
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VERSION
KEYWORDS
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CC295265/c
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                           DEFINITION
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                                                                                                                                                                                                                                                                                Query Match
Best Local 8
                                                                                                                                                                                                                                                               Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
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RESULT 39 CX396192/c

DEFINITION

묽 S

381

ORIGIN

Matches Query Match

Local

SOURCE ORGANISM

KEYWORDS VERSION ACCESSION

REFERENCE

AUTHORS

COMMENT

TITLE

FEATURES

**Bource** 

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Local
                                                                                                                                  593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Archosauria; Aves; Neognathae; Ga
Phasianinae; Gallus.
1 (bases 1 to 874)
1 (c., Higginbotham, J., Wy
Warren, W., Graves, T., Mardis, B. a
Gallus gallus BAC End Reads
Unpublished (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19;
CX418837 883 bp
JGI_XZG65774.fwd NIH_XGC_tropGas7
IMAGE:7579925 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 CAGGACACAGTGGCTTTTGAC 21
                                                                                                                                                                   1 CAGGACACAGTGGCTTTTGAC 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           High quality sequence start: 33
High quality sequence stop: 589.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gallus gallus (chicken)
Gallus gallus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             genomic survey sequence. CC295265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CC295265
CH261-52A19_RM1.1 CH261 Gallus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Genome Sequencing Center Washington University School of Medicine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eute
Archosauria; Aves; Neognathae; Galliformes; Phasianidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Seq primer: RM1 TACGACTCACTATAGGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Richard K. Wilson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CC295265.1 GI:30666706
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Class: BAC ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: submissions@watson.wustl.edu
Insert Length: 182000 Std Error: 0.00
                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                  CTGGACACAGTGGCTTTTGTC 573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGGACACAGTTGCTGTTGAC 109
                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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                                                                                                                                                                                                                                                                                               /note="Vector: pTARBAC2.1; Site_1: EcoRI; Site_2: EcoRI;
CH261 Female Chicken library - for library and clone
ordering information: http://www.chori.org/bacpac"
                                                                                                                                                                                                                                                                                                                                                       /cell_line="UCD001, inbred 256"
/clone_lib="CH261"
                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Gallus gallus"
/mol_type="genomic DNA"
/strain="Red Jungle Fowl"
/db_xref="taxon:9031"
                                                                                                                                                                                                                                                                                                                                                                                            clone="CH261-52A19"
/sex="female"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             . .874
                                                                                                                                                                                                                       84.8%;
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                                                                                                                                                                                                                       Score 17.8; DB 12;
Pred. No. 1.6e+03;
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Pred. No. 1
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  and Wilson,R.
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                     Xenopus
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                     tropicalis
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                                                                                                                                                                                                                                           Length 874;
                                        linear
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CH261-52A19,
                                      EST 07-SEP-2005
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                       cDNA clone
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ACCESSION
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DR897380/c
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                                                                                                                       DEFINITION
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                                                                                                                                                                                                                                                                                                                                     Local
                                                                                                                                                                                                                                        789
                                                                                                                                                                                                                                                                                                                     19;
                                                                                  895 bp mRNA
JGI XZT42063 fwd NIH XGC tropTad5 Xenopus
IMAGE:7617582 5', mRNA sequence
DR897380
                                                                                                                                                                                                                                                                             μ
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1 (bases 1 to 883)

Richardson, P., Lucas, S., Rokhsar, D., Detter, J.C., Ng, D.C., Brokstein, P. and Lindquist, E.A.

DOE Joint Genome Institute Xenopus tropicalis EST project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Naming Conventions: EST name is generated by the concatenation of the JGI Clone Id and the direction of sequencing. The suffix '.fwd' indicates a forward sequencing read of the insert. It does not necessarily reflect the orientation of the insert. Plate: XZG 0685 row: 1 column: 3
High quality sequence stop: 827.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Email: cdna@jgi-psf.org
Tissue Procurement: Richard M. Harland Laboratory, University of
California, Berkeley: http://tropicalis.berkeley.edu/home
cDNA Library Preparation: Richard M. Harland Laboratory, University
of California, Berkeley
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Tel: 925 296 5600
Fax: 925 296 5710
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DOE Joint Genome Institute
Xenopus tropicalis
Xenopus tropicalis
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Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
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CX418837.2 GI:74266898
                                                            DR897380.1 GI:71586632
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                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                 CAGGACACAGTGGCTTTTGAC 21
                                                                                                                                                                                                                                        CAGGACACAGTTGCTGTTGAC 769
                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /clone lib="NIH XGC tropGas7"
/note="Vector: pCS108; Site 1: SalI; Site 2: NotI;
Gastrula library constructed by Russell B. Fletcher in R.
Harland's lab using poly A RNA and oligo dT primers
(Invitrogen SuperScript Plasmid System for cDNA Synthesis and Cloning). SalI (5' end) -NotI (3' end) cDNA was
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BlectroTen-Blue*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /db_xref."taxon:8364"
/clome="IMAGE:7579925"
/tissue_type="whole embryo"
/dev_stage="Gastrula (st. 10.5-12.5)"
/dev_btage="Gastrula (st. 10.5-12.5)"
                                                                                                                                                                                                                                                                                                                                                                                                                    inserted into vector pCS108 (http://mcb.berkeley.edu/labs/harland/pages/plasmids.html)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            organism="Xenopus tropicalis"
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                                                                                                                                                                                                                                                                                                                                   84.8%;
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                        (western clawed frog)
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Pred. No. 1.6e
0; Mismatches
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                                                                                                                     tropicalis
                                                                                                                                                                                                                                                                                                                                                    Length 883;
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                                                                                                                                         linear
                                                                                                                                         EST 01-AUG-2005
                                                                                                                       CDNA
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AUTHORS
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AUTHORS
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DT398630/c
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JOURNAL
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                                                                                                                                                                                                                                                                                                                                     461
                                                                                                                                                                                                                                                                                                                                                                                                                19;
                                                                                                                                       EST
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Other_ESTs: JGI xZr42063.rev
Conteact: Lindquist,E.A., Richardson,P.
DOB Joint Genome Institute
2800 Mitchell Drive, Walnut Creek, CA 94598, USA
Tel: 925 296 5600
Fax: 925 296 5710
Email: cdha@jgi-psf.org
Tissue Procurement: Richard M. Harland Laboratory, University
California, Berkeley: http://tropicalis.berkeley.edu/home
CDNA Library Preparation: Richard M. Harland Laboratory, University
of California, Berkeley
CDNA Library Preparation: Richard M. Harland Laboratory, University
Of California, Berkeley
             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae; Xenopodinae; Xenopus; Silurana.

1 (bases 1 to 895)
                                                                                                                                                                                                                                                                                                         DT398630
895 bp mRNA linear EST 25-AUG-
JGI CABI2333.fwd NIH XGC tropOvil Xenopus tropicalis cDNA clone
IMAGE: 855953 5', mRNA sequence.
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Plate: XZT 0437 row: m column: 4
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1 (bases 1 to 895)
1 (bases 1 to 895)
Richardson,P., Lucas,S., Rokhsar,D., Detter,J.C., Ng,D.C., Brokstein,P. and Lindquist,B.A.

DOB Joint Genome Institute Xenopus tropicalis EST project
I (bases 1 to Richardson, P.,
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Location/Qualifiers
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Clone Distribution: I.M.A.G.E. Consortium/LLNL:
http://image.llnl.gov
                                                                                                                                                                                          Xenopus tropicalis (western clawed frog)
                                                                                                                                                                                                                                                        DT398630.1 GI:73784827
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
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/clone lib="NIH XGC tropTad5"
/clone lib="NIH XGC tropTad5"
/note="Vector: pCS108; Site 1: SalI; Site 2: NotI; Tadpole
/note="Vector: pCS108; Site 1: Pletcher in R. Harland's
library constructed by Russell B. Fletcher in R. Harland's
lab using poly A RNA and oligo dT primers (Invitrogen
superScript Plasmid System for cDNA Synthesis and
cloning). SalI (5' end) -NotI (3' end) cDNA was inserted
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'tissue_type="whole embryo"
'dev_stage="Tadpole (st. 36-41)"
'lab_host="E. coli XL1-Blue derivative, Stratagene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           mol_type="mRNA"
db_xref="taxon:8364"
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   Lucas, S.,
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Pred. No. 1.
   Rokhsar, D.,
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   Detter, J.C.,
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EST project

Ng, D.C.,

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RESULT 44
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                                                                                                                                                                                                                                                                                                                                               476
                                                                                           JGI XZT69314.fwd NIH XGC_tropTad5
IMAGB:7788220 5', mRNA sequence.
CX333579
CX333579.2 GI:74307480
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Plate: CABI 0025 row: i column: 7
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DOB Joint Genome Institute
2800 Mitchell Drive, Walnut Creek, CA 94598,
Tel: 925 296 5600
Xenopus tropicalis
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
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DNA Sequencing: DOE Joint Genome Institute: http://www.jgi.doe
Clone Distribution: I.M.A.G.E. Consortium/LLNL:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tissue Procurement: Robert M. Grainger cDNA Library Preparation: Bruce Blumberg Laboratory,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unpublished (2004)
Other_ESTs: JGI_CABI2333.rev
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                                                                         Kenopus tropicalis (western clawed frog)
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925 296 5710
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /tissue_type="Oviduct"
/dev_stage="Adult"
/lab_host="ElectroMAX DH10B T1 Phage Resistant cells"
/lab_host="ElectroMAX CT tropOvi1"
/clone_lib="NIH_XGC tropOvi1"
/note="Vector: pCS107; Site_1: EcoRI; Site_2: XhoI; The
/ibrary_was prepared from 5 ug of poly A+ RNA by oligo-dT
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/mol type="mRNA"
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/strain="N6 (Nigerian 6th generation inbred)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                db_xref="taxon:8364"
clone="IMAGE:7855953"
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90.5%;
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Pred. No. 1.6e+03;
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Email: cdna@jgi-psf.org

Tissue Procurement: Richard M. Harland Laboratory, University of

California, Berkeley: http://tropicalis.berkeley.edu/home

CDNA Library Preparation: Richard M. Harland Laboratory, University

of California, Berkeley

DNA Sequencing: DOE Joint Genome Institute: http://www.jgi.doe.gov

Clone Distribution: I.M.A.G.E. Consortium/LLNL:

http://image.llnl.gov

Naming Conventions: EST name is generated by the concatenation of
the JGI Clone Id and the direction of sequencing. The suffix '.fwd'
indicates a forward sequencing read of the insert. It does not
necessarily reflect the orientation of the insert.

Plate: XZT 0721 row: c column: 2

High quality sequence stop: 803.
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AGENCOURT 15066211 NICHD XGC Emb5
IMAGE:6981253 5', mRNA sequence.
CF222676
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Brokstein,P. and Lindquist,B.A.
DOE Joint Genome Institute Xenopus tropicalis EST
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2800 Mitchell Drive, Walnut Creek, CA 94598,
Tel: 925 296 5600
Pax: 925 296 5710
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On Jan 4, 2005 this sequence version replaced gi:57070051
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CF222676.1 GI:33423384
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1 (bases 1 to 896)
     Xenopodinae; Xenopus; Silurana.

1 (bases 1 to 906)

NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                Xenopus tropicalis
                                                                                                     Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                          Xenopus tropicalis (western clawed frog)
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/note="Vector: pCS108; Site_1: SalI; Site_2: NotI; Tadpole library constructed by Russell B. Fletcher in R. Harland's lab using poly A RNA and oligo dT primers (Invirrogen SuperScript Plasmid System for cDNA Synthesis and Cloning). SalI (5' end) -NotI (3' end) cDNA was inserted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /tissue_type="whole embryo"
/dev stage="Tadpole (st. 36-41)"
/lab_host="E. coli XL1-Blue derivative,
ElectroTen-Blue"
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(http://mcb.berkeley.edu/labs/harland/pages/plasmids.html)
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/mol type="man: 8
/db xref="reaxon: 8364"
/clone="IMAGE:7788220"
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90.5%;
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Stratagene

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EST 04-AUG-2003

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                                                                             Genome Sequencing Center
Washington University School of Medicine
Email: submissions@watson.wustl.edu
Insert Length: 182000 Std Error: 0.00
Seq primer: RMI TACGACTCACTATAGGGAGA
Class: BAC ends
High quality sequence start: 34
High quality sequence stop: 713.
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Tlssue Procurement: Robert M. Grainger
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LIML)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM1642 row: C column: 12
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                                                                                                                                                                                                              1 (bases 1 to 971)
Kremitzki,C., Higginbotham,J., Wylie,K., Cart
Warren,W., Graves,T., Mardis,E. and Wilson,R.
Gallus gallus BAC End Reads
Unpublished (2003)
Contact: Richard K. Wilson
                                                                                                                                                                                                                                                                                                                  Gallus gallus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae;
Phasianinae; Gallus.
                                                                                                                                                                                                                                                                                                                                                                                                    genomic survey sequence.
CC304636
CC304636.1 GI:30676077
GSS.
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High quality sequence stop: 715.
Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CC304636 971 by CH261-89N15_RM1.1 CH261 Gallus
                                                                                                                                                                                                                                                                                                                                                                                       Gallus gallus (chicken)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unpublished (1999)
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/dev gtage="embryo, stages 10-13"
/dev gtage="PHONG (phage-resistant)"
/clone_lib="NICHD_XGC_Emb5"
/note="Vector: pCMV-SPORT6.1; Site_1: NotI; Site_2: EcoRCloned_unidirectionally. Primer: Oligo dT. Average inser size 2.0 kb. Constructed by Invitrogen. Note: This is a Xenopus Gene Collection (XGC) library."
/organism="Gallus gallus"
/mol_type="genomic DNA"
/strain="Red Jungle Fowl"
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/db_xref="taxon:8364"
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Pred. No. 1.6e+03;
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                                                                                 Phase I and II Team.
Analysis of the mouse transcriptome of 60,770 full-length cDNAs
Nature 420, 563-573 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Carninci,P. and Hayashizaki,Y.
High-efficiency full-length cDNA cloning
Meth. Enzymol. 303, 19-44 (1999)
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HTC; CAP trapper.
Mus musculus (house mouse)
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                                                                                                                                                                                                     Functional
                                                                                                                                                                                                                     FANTOM Consortium.
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                                                                                                                                                                                  409,
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/cell_line="UCD001, inbred
/clone_lib="CH261"
                                                                                                                                                                                                   annotation of a full-length mouse cDNA collection
                                                                                                                                                                                    685-690
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Pred. No. 1.
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                                                                                                                    based
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/note="Vector: pTARBAC2.1; Site 1: ECORI; Site 2: ECORI; CH261 Female Chicken library - For library and clone ordering information: http://www.chori.org/bacpac"
                                                                                                                                                                                                                                                                                          /db_xref="taxon:9031"
/clone="CH261-89N15"
Length
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2617 bp mRNA linear embryo embryonic body between full-leagth enriched library, protein, full insert sequence HTC 02-SEP-2005 <u>.</u> Gaps 0

Carninci,P., Shibata,Y., Hayatsu,N., Sugahara,Y., Shibata,K., Itoh,M., Konno,H., Okazaki,Y., Muramatsu,M. and Hayashizaki,Y. Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes Genome Res. 10 (10), 1617-1630 (2000) Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi; Muroidea; Muridae; Murinae; Mus. diaphragm region clone:9430022A14

Shibata, K., Itoh, M., Alzawa, K., Nagaoka, S., Sasaki, N., Carninci, P., Konno, H., Akiyama, J., Nishi, K., Kiteunai, T., Tashiro, H., Itoh, M., Sumi, N., Ishi, Y., Nakamura, S., Hazama, M., Nishine, T., Harada, A., Yamamoto, R., Matsumoto, H., Sakaguchi, S., Ikegami, T., Kashiwagi, K., Fujiwaka, S., Inoue, K., Togawa, Y., Izawa, M., Ohara, E., Watahiki, M., Yoneda, Y., Ishikawa, T., Ozawa, K., Tanaka, T., Matsuura, S., Kawai, J., Okazaki, Y., Muramatsu, M., Inoue, Y., Kira, A. and Hayashizaki, Y., Okazaki, Y., Muramatsu, M., Inoue, Y., Kira, A. and Hayashizaki, Y., RIKEN integrated sequence analysis (RISA) system-384-format sequencing pipeline with 384 multicapillary sequencer Genome Res. 10 (11), 1757-1771 (2000)

The RIKEN Genome Exploration Research Group Phase II Team and

Genome Exploration Research Group 9 functional annotation

RIKEN Genome Exploration Research Group, Genome Science (Genome Network Core Team) and the FANTOM Consortium. Antisense Transcription in the Mammallan Transcriptome Science 309, 1564-1566 (2005)

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REFERENCE
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Please visit our web site for further details.
URL:http://genome.gsc.riken.jp/
URL:http://fantom.gsc.riken.jp/.
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8 (bases 1 to 2617)
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                                                                                                                                                                                       CAGGACACAGTGGCTTTTGAC 21
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KRRSSKDLLGKPQLYDTPYEPSEGGQRVAREVKTRADSRLPEEDDRPAAEXGPWEW
KREQIARALSVQPEGSBRPPGREDAGRPHHIQKTLKPTLEDHGDGEKVDPGLALERQWEW
WYHGSISRAEAESRLQPCKEAAYLVRNSESGNSKYSIALKTSQGCVHIIVAQTKDNKY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /translation="MRRPPAPGAPRCLSWASSLFCSAASTLPGPLMAAKWFKERPLTL
KTASERAR PGGAGGKPKKNSETGGAAPTPFKKGRKASAAELGASKASKGPPKDSRLSRD
SLQGLIQAAAGKGRKMSRVTATATEEEPHRGAVTKSAGCSTYISRLIKKDTQEKKKKS
AYPGGGSTSSSSSSSASSPSSLGPELDKAKIMRQQDTVIILEDYADPYDAKRTKG
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/protein_id="BAC28787.1"
/db_xref="GI:26330097"
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(evidence: ProCrest, decoder, Longest-ORF)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /clone_lib="RIKEN full-length enriched mouse cDNA library"
/dev_stagge="12 days embryo"
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High-efficiency full-length cDNA cloning
Meth. Enzymol. 303, 19-44 (1999)
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eut
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AK157580.1 GI:74185930
HTC; CAP trapper.
Mus musculus (house mouse)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nature 409
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RIKEN Genome Exploration Research Group Phase II Team and the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           and Hayashizaki, Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AKI57580
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             annotation of a full-length mouse cDNA collection (6821), 685-690 (2001)
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RCS Carninci, P., Kasukawa, T., Katayama, S., Gough, J., Frith, M.C., Meda, N., Oyama, R., Ravasi, T., Lenhard, B., Wells, C., Kodzius, R., Shimokawa, K., Bajic, V. B., Brenner, S.E., Batalov, S., Forrest, A.R., Shimokawa, K., Bajic, V. B., Brenner, S.E., Batalov, S., Forrest, A.R., Shimokawa, K., Bajic, V. B., Brenner, S.E., Batalov, S., Forrest, A.R., Shimokawa, K., Bajic, V., B., Bersel, M., Batalov, S., Forrest, A.R., Annoesi. Implombato, A., Apweiler, R., Aturaliya, R.N., Bailey, T.L., Bansal, M., Baxter, L., Beisel, K.W., Bersano, T., Bono, H., Chalk, A.M., Chiu, K.P., Choudhary, V., Christoffels, A., Clutterbuck, D.R., Chalk, A.M., Chiu, K.P., Choudhary, V., Christoffels, A., Clutterbuck, D.R., Chiu, K.P., Choudhary, V., Christoffels, A., Clutterbuck, D.R., Chiu, R.P., Chila, R., Dalla, B., Dalla
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Katayama, S., Tomaru, Y., Kasukawa, T., Waki, K., Nakanishi, M., Nakamura, M., Nishida, H., Yap, C.C., Suzuki, M., Kawai, J., Suzuki, H. Carninci, P., Hayashizaki, Y., Wells, C., Frith, M., Ravasi, T., Pang, K.C., Hallinan, J., Mattick, J., Hume, D.A., Lipovich, L., Patalov, S., Engetrom, P.G., Mizuno, Y., Faghihi, M.A., Sandelin, A., Chalk, A.M., Mottagui-Tabar, S., Liang, Z., Lenhard, B. and Wahlestedt, C.
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Nature 420 (6915), 563-573 (2002)
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genomic survey sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Submitted (30-MAR-2004) Yoshihide Hayashizaki, The Institute of Physical and Chemical Research (RIKEN), Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, 230-0045, Japan (E-mail:genome-resægsc.riken.jp, URL:http://genome.gc.riken.jp/, Tel:81-45-503-9222, Fax:81-45-503-9216)
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8 (bases 1 to 5736)
8 Arakawa, T., Carninci, P., Fukuda, S., Hashizume, W., Hayashida, K.,
Hori, F., Tida, J., Imamura, K., Imotani, K., Itoh, M., Kanagawa, S.,
Kawai, J., Kojima, M., Konno, H., Murata, M., Nakamura, M., Ninomiya, N.,
Nishiyori, H., Nomura, K., Ohno, M., Sakazume, N., Sano, H., Sasaki, D.,
Shibata, K., Shiraki, T., Tagami, M., Tagami, Y., Waki, K., Watahiki, A.,
Muramateu, M. and Hayashizaki, Y.
Direct Submission
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                                                          tigr-gss-dog-17000368649375
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Tissues were provided by Dr. John Todd (Dept. of Medical Genetics
Wellcome Trust Centre for Molecular Mechanisms in Disease Wellcom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Trust/MRC building Addenbrookes Hospital Cambridge) whose assistance we gratefully acknowledge.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RIKEN Genome Exploration Research Group
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    URL:http://genome.gsc.riken.jp/
URL:http://fantom.gsc.riken.jp/.
                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Please visit our web site for further details.
                                                                                                                                                                                                                                                                  CAGGACACAGTGGCTTTTGAC 21
                                                                                                                                                                                                                                  CAGGACACAGTGGTTTCTGAC 1765
                                                                                                                                                                                                                                                                                                                                              Conservative
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WYHGSISRAEAESRLQPCKEAAYLVRNSESGNSKYSIALKTSQGCVHIIVAQTKDNKY
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mol_type="mRNA"
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90.5%;
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HS_5147_Al_Al0_SP6E RPCI-11 Human Male BAC Library Homo sapiens genomic_clone Plate=723 Col=19 Row=A, genomic_survey sequence.
Email: jwallace@u.washington.edu
Clones are derived from the human BAC library RPCI-11. For BAC
library availability, please contact Pieter de Jong
(pieter@dejong.med.buffalo.edu). Clones may be purchased from
BACPAC Resources (http://bacpac.med.buffalo.edu/ordering_bac.htm)
                                                                                                                                                                                 High Throughput Sequencing Center University of Washington 401 Queen Anne Avenue North, Seattle, Tel: (206) 616-3618
Fax: (206) 616-3887
                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence-tagged connectors: A sequence approach to mapping and scanning the human genome Proc. Natl. Acad. Sci. U.S.A. 96 (17), 9739-9744 (1999)
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Fax: 301-838-0208
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Rusch,D.B., Delcher,A.L., Pop,M., Wang,W., Fraser,C.M. and
Venter,J.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hominidae, Homo.
1 (bases 1 to 430)
Mahairas,G.G., Wallace,J.C., Smith,K., Swartzell,S., Holzman,T.,
Mahairas,G., Wallace,J.C., Smith,K., Swartzell,S., Holzman,T.,
Keller,A., Shaker,R., Furlong,J., Young,J., Zhao,S., Adams,M.D. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
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High Throughput Sequencing Center
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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/mol_type="genomic DNA"
/strain="Standard Poodle"
/db_xref="taxon:9615"
/clone_lib="Dog Library"
/note="Site_1: BstXI; Libraries were prepared from peripheral blood"
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Seq primer: SP6
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                        2 AGGACACAGTGGCTTTTGA 20
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Location/Qualifiers
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/note="Vector: pBACe3.6; Site 1: EcoRI; Site 2: EcoRI;
Male blood DNA was isolated from ond male blood DNA was isolated from ond ficoRI and partially disested with a combination of EcoRI and EcoRI Methylase. Size selected DNA was cloned into the pBACe3.6 vector at EcoRI sites"
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/clone="Plate=723 Col=19 Row=A"
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                                                                                                                                                                                                                                                                             /sex="male'
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                                                                                                                                                                                                                                                                                                                                                                             Use of nonionic detergent to suppress enzyme inhibition by ionic detergent - partic. to enhance activity of e.g. DNA or RNA polymerase nucleic acid amplification(s).
                                                                                                                                                                                          Enzyme inhibition suppressor; polymerase; detergent; SDS; LLS; probe; sodium dodecyl sulphate; lithium lauryl sulphate; detection; polymerase chain reaction; ss.
                                                                                                                    10-MAR-1995;
                                                                                                                                                                      Human papillomavirus.
                                                                                                                                                                                                                              HPV E6
                                                                                                                                                                                                                                                                           AAT03309;
                                                                                                                                                                                                                                                                                             AAT03309 standard; DNA; 28
                                                                                                  10-MAR-1994;
                                            1995-312773/41.
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                                                                                GEN-PROBE INC
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ADQ17797
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AAS55455
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ABK31067
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ADQ52446
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ADP28157
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Abl86945 Human ova
Ac162395 Human col
Ac154642 Human col
Aal24284 Human bre
Adp28157 Human sec
Aas58298 CDNA #974
Aa855455 Streptoco
Abd244507 Streptoco
                                                                                                                                                                                                                                                                                                                                                                                                      Aac74671 Human ORF
Ach32021 Human end
Ach37381 Human end
Abq44663 Oligonucl
                                                                                                                                                                                                                                                                                                                                                                                                                                         Aai82699 Human pol
Adq52446 Novel can
Aaf59800 Moraxella
Adq17797 Human sof
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Acn44484 Mouse gen
Adg20017 Human sof
Aaf28554 Genomic f
Aat71528 Glioblast
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Continuation (4 of
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Adl02689 DNA encod
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CO Oligonucleotide which will hybridise under selected comprising an CC Papillomavirus (HPV) Type 16 and/or 18 (but not Types 6, 11, 31, 33, 35, CC 39, 45, 51, 52, or 58) target nucleic acids to form detectable target: CC probe duplex. The present sequence represents a specifically claimed Ct target region. Oligonucleotides are useful to detect HPV Type 16 and/or CC IS in samples e.g. cervical smears, body fluid, and distinguish these CC from other HPV variants. Papillomaviruses are small DNA viruses and HPV Types 16 and 18 are associated with genital cancers. HPV Type 16 and/or 18 can be detected by adding a probe and detecting probe:target CC duplex formation; target nucleic acid in a sample. HPV Type 16 or CC duplex formation; target nucleic acid in a sample. HPV Type 16 or CC 18 can be specifically detected by amplifying nucleic acids with at least CC noe specifically claimed PCR primer. For Type 18 detection, a helper CC probe may be used. Oligonucleotides can distinguish target sequences from CC phylogenetically close HPV Types 16 and 18 whilst available detection
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human Papillomavirus; probe; target region; genital cancer; HPV; cervical smear; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                           distinguish between Type 16 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1997-274349/25.
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Pred. No.
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sera react with antigens of all papillomaviruses

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Human Papillomavirus.

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FN GORDON P, Brentano ST, (1)

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FN Human Papillomavirus (FPV)

FN Horbes for detection of H

FT Probes for detection of H

FT Probes for detection assay

CC Claim 1; Page 34; 70pp; E

XX

Novel hybridisation assay

CC Oligonucleotide which will

CC appillomavirus (HPV) Type

CC 39, 45, 51, 52, or 58) ta

CC probe duptes e.g. cervic

CC 18 in samples e.g. cervic

CC 18 in samples e.g. cervic

CC amplify HPV Type 16 and/o

CC amplify HPV Type 16 and 18 are assoc
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                                                                                                                                                                                                                                                                                Novel hybridisation assay probes have been developed comprising an CC oligonuclectide which will hybridise under selected conditions to Human CC papillomavirus (HPV) Type 16 and/or 18 (but not Types 6, 11, 31, 33, 35, CC 39, 45, 51, 52, or 58) target nucleic acids to form detectable target: CC probe duplex. The present sequence represents a specifically claimed CC target region. Oligonucleotides are useful to detect HPV Type 16 and/or 18 in samples e.g. cervical smears, body fluid, and distinguish these from other HPV variants. Papillomaviruses are small DNA viruses and HPV CTypes 16 and/or 18 nucleic acid in a sample. HPV Type 16 and/or 18 nucleic acid in a sample. HPV Type 16 and/or 18 nucleic acid in a sample. HPV Type 16 cand/or 18 can be detected by adding a probe and detecting probe:target CC duplex formation; target nucleic acid is optionally amplified. Type 16 or CC 18 can be specifically detected by amplifying nucleic acids with at least one specifically claimed PCR primer. For Type 18 detection, a helper CC probe may be used. Oligonuclectides can distinguish target sequences from CC phylogenetically claimed PCR primer. For Type 18 detection, a helper CC probe may be used. Oligonuclectides can distinguish target sequences from CC phylogenetically claimed PCR primer is and 18 whilst available detection CC sera react with antigens of all papillomaviruses
                                                                                                 Query Match
Best Local Similarity
Matches 28; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Probes for detection of Human Papillomavirus Type 16 and Type 18 - can distinguish between Type 16 and 18, associated with genital cancers.
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100.0%; P
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Pred. No. 0.025;
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Pred. No. 0.025;
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AAT72334
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CC Novel hybridisation assay probes have been developed comprising an CC oligonucleotide which will hybridise under selected conditions to Human CC papillomavirus (HPV) Type 16 and/or 18 (but not Types 6, 11, 31, 33, 35, CC 39, 45, 51, 52, or 58) target nucleic acids to form detectable target: CC probe duplex. The present sequence represents a specifically claimed CC target region. Oligonucleotides are useful to detect HPV Type 16 and/or 18 in samples e.g. cervical smears, body fluid, and distinguish these CC from other HPV variants. Papillomaviruses are small DNA viruses and HPV CT Types 16 and/or 18 mucleic acid in a sample. HPV Type 16 and/or 18 mucleic acid in a sample. HPV Type 16 and/or 18 can be detected by adding a probe and detecting probe:target CC duplex formation; target nucleic acid is optionally amplified. Type 16 or 18 can be specifically detected by amplifying nucleic acids with at least one specifically claimed PCR primer. For Type 18 detection, a helper CC probe may be used. Oligonucleotides can distinguish target sequences from CC phylogenetically close HPV Types 16 and 18 whilst available detection CC sera react with antigens of all papillomaviruses
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Best Local Similarity
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                                                            AAT72334;
                                                                                                                        AAT72334 standard; RNA; 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 28 BP; 11 A; 6 C; 6 G; 5 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Probes for detection of Human Papillomavirus Type 16 and Type 18 - c distinguish between Type 16 and 18, associated with genital cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1997-274349/25
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAT72299;
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                                                                                                                                                                                                                                                                                                                              1 GAACAGCAATACAACAAACCGTTGTGTG 28
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Pred. No. 0
                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
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09-FEB-1998

(first entry)

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RESULT 6
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AC ADX2
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DT 05-M
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KW cell
KW canc
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OS Huma
OS Huma
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FH Key
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel hybridisation assay probes have been developed comprising an coligonuclectide which will hybridise under selected conditions to Human coligonuclectide (HPV) Type 16 and/or 18 (but not Types 6, 11, 31, 33, 35, 35, 45, 51, 52, or 58) target nucleic acids to form detectable target: probe duplex. The present sequence represents a specifically claimed target region. Oligonucleotides are useful to detect HPV Type 16 and/or 18 in samples e.g. cervical smears, body fluid, and distinguish these from other HPV variants. Papillomaviruses are small DNA viruses and HPV Types 16 and 18 are associated with genital cancers. HPV PCR primers can amplify HPV Type 16 and/or 18 mucleic acid in a sample. HPV Type 16 and/or 18 can be detected by adding a probe and detecting probe:target duplex formation, target nucleic acid is optionally amplified. Type 16 or 18 can be specifically detected by amplifying nucleic acids with at least one specifically claimed PCR primer. For Type 18 detection, a helper probe may be used. Oligonucleotides can distinguish target sequences from phylogenetically close HPV Types 16 and 18 whilst available detection sera react with antigens of all papillomaviruses
                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local
                             Human papillomavirus Synthetic.
                                                                                                                           Human papillomavirus type 16 E6 delta151 mutant DNA
                                                                                                                                                            05-MAY-2005
                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 28 BP; 11 A; 6 C; 6 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; Page 34; 70pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Probes for detection of Human distinguish between Type 16 ar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1997-274349/25
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cervical smear; ss.
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                                                                             cancer; neoplasm;
                                                                                             cell culture;
                                                                                                                                                                                           ADX26909;
                                                                                                                                                                                                                        ADX26909 standard; DNA; 452
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                                                                                                                                                                                                                                                                                                                                                                  23;
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                                                                                                                                                                                                                                                                                                                                                                                 Similarity
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                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                          (first entry)
                                                                                           immortalization;
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Location/Qualifiers
                                                                              mutant;
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82.1%; E
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                                             type
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and 18, associated with genital cancers
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Pred. No. 0.025;
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                                                                                           Gynecology and
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                                                                                             obstetrics; Andrology;
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RESULT 7
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DT 21-C
DT 21-C
DT Cannot
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Best Local 9
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/*tag= a
/note= "Wild-type bases
misc_difference 449. .450
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   06-APR-1998;
                                                           11-SEP-2001
                                                                                                                                                                              Human papillomavirus
                                                                                                                                                                                                                                          cancer; tumour;
                                                                                                                                                                                                                                                                   Tumour antigen; human; vaccine; cellular immune response; immunogen; E6;
                                                                                                                                                                                                                                                                                                                              Human papillomavirus E6 tumour antigen derived DNA
                                                                                                                                                                                                                                                                                                                                                                                                21-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABQ76223;
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(KOKU-) KOKURITSU GAN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GAACAGCAATACAACAAACCGTTGTGTG 28
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   98US-00056105
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            response in a patient to a target protein or its fragment. The method involves introducing a vector containing a nucleotide sequence encoding a chimeric immunogen comprising a protein processing signal and the target protein or its fragment. The immunogen is produced by the cells and processed so that the target protein or its fragment is presented to the patients immune system and cellular immune response is initiated. The method and vectors can be used as a form of vaccination and could be used to generate a cellular immune response in patients to, e.g. cancerous tumours. The cellular immune response is the predominant immune response in the patient. This sequence represents a DNA fragment which encodes a tumour antigen from human papillomavirus E6 described in the method of the invention. Note: The information in this spec has been previously
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Generating cellular immune response in patient to target protein - comprises introducing vector with nucleotide sequence encoding immunogen comprising protein processing signal into cell of patient.
                                                                                                                                                                                                                                                                                  immortalised non-tumourigenic; human Schwann; schwannoma cell line; screening cancer chemotherapeutic; antineoplastic activity; carcinogenicity; neuroprotective; neurodegeneration; SV40; simian Virus 40; adenovirus; human papilloma virus; E6; E7; cytosta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This invention describes a novel method for generating a cellular immune response in a patient to a target protein or its fragment. The method
                                                                                                                                                                                                                                                                  gene therapy; cancer; HPV16; ds.
                                                                                                                                                                                                                                                                                                                                                                                                          18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADC37149 standard; DNA; 459 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 456 BP; 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  disclosed in WO199845444 however this spec contained no sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Col 91-92; 61pp; English.
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 WPI; 2003-722006/68.
                                                                                                                                                                                                                                                                                                                                                                       459bp HPV16 subgenomic fragment DNA sequence.
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                               Hung G,
                                                                                                01-MAR-2002; 2002US-0361528P
                                                                                                                                03-MAR-2003; 2003WO-US006314
                                                                                                                                                                   12-SEP-2003.
                                                                                                                                                                                                   WO2003073996-A2
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                                                                                                                                                                                                                                   papillomavirus type 16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 GAACAGCAATACAACCAAACCGTTGTGTG 28
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                                                                 HOUSE EAR INST
                                 Li X;
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100.0%; F
tive 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 28; DB 2;
Pred. No. 0.034;
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    Length 456;

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Producing an immortalized non-tumorigenic human Schwann or schwannoma cell line for treating cancer or neurodegenerative disorder comprises selecting for immortalized cells that express the exogenous immortalizing
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Disclosure; SEQ ID NO 1; 29pp; English

CC screening carcinogenicity of an agent; acreening the neuroprotective cartivity of an agent; treating neurodegeneration in a patient; and a kit cfor screening a pharmacological agent on schwannomas cells. In the method of producing an immortalised non-tumourigenic human Schwann or schwannoma cell line, the polynucleotide is a subgenomic fragment of a virus consisting of SV40 (Simian Virus 40), adenovirus and human papilloma consisting of types 18, 31, 33 or 35, but preferably 16. The immortalised constitution of schwann or schwannoma cell line has cytostatic and constitution of the man schwann or schwannoma cell line has cytostatic and concurrigenic human Schwann or schwannoma cell line has cytostatic and concurring the method is useful for producing an immortalised non-tumourigenic human schwann or schwannoma cell line useful for screening cancer chemotherapeutic and antineoplastic activity of an agent, testing carcinogenicity of an agent and screening a neuroprotective activity of an agent and screening and activity of an agent and screening and activity of an agent and activity of an agent and activity of an agent and activity of an agent and activity of an agent and activity of an agent and activity of an agent and activity of an agent and activity of an agent and activity of an agent and activity of an agent and activity of an agent and activity of an agent and activity of an agent and activity of an agent and activity of an agent and activity of an agent and activity of an agent and activity of an agent and activity of an agent and activity of an agent and activity of an agent and activi The invention relates to a the production of an immortalised non-tumourigenic human Schwann or schwannoma cell line comprising: providing a cell culture of human Schwann or schwannoma cells, introducing a polynucleotide comprising an exogenous immortalising gene into the cells, and selecting for immortalised cells that express the exogenous an agent and for preparing a composition for diagnosing or treating neurodegenerative disorders and cancer. This polymucleotide represents the DNA of a 455b HPVI6 sequence, a subgenomic fragment used in the production of the immortalised non-tumourigenic human Schwann or of a pharmacological agent on human Schwann or schwannoma cells schwannoma cell line of immortalising gene and retain phenotypic properties of Schwann or schwannoma cells. The invention further comprises: determining the effect the invention.

Sequence 459 BP; 157 A; 71 C; 100 G; 131 T; 0 U; 0 Other;

á Matches Query Match POCAT 28; Similarity GAACAGCAATACAACAAACCGTTGTGTG 28 100.0%; ilarity 100.0%; Conservative 0 0; Pred. Score 28; Mismatches No. 0.034; DB 10; 0; Length 459; Indels <u>,</u> Gaps 0

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266
GAACAGCAATACAACAAACCGTTGTGTG 293
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RESULT 9
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XX H ADF09607 standard; CDNA; ВP

12-FEB-2004

(first entry)

Human papillomavirus 16 E6 cDNA SEQ ID NO:108

human; protein-protein interaction; human papilloma virus; HPV; cancer; 88; virucide; cytostatic; vaccine; gene

papillomavirus

WO2003068940-A2

21-AUG-2003

14-FEB-2003; 2003WO-US004594.

14-FEB-2002; 2002US-0356911P

(CURA-) CURAGEN CORP. (HOFF ) HOFFMANN LA ROCHE INC

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RESULT 10
AAL54430
ID AAL54430
ID AAL54430
XX AAL54
AC AAL54
XX Viruc
KW Viruc
KW selec
KW human
KW malig
XX Moanli
KW malig
XX IIII
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Virucide; cytostatic; anti-HIV; dermatological; small interfering RNA; selective post-translational silencing; siRNA; oncogene; genital wart; human papilloma virus; HPV gene; cancer; human cervical cancer; HIV; smallpox; flu; common cold; cervical cancer; penile cancer; malignant squamous cell carcinoma; verruca vulgaris; gene therapy; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to a novel purified complex comprising a first polypeptide and a second polypeptide, where the polypeptides comprise defined amino acid sequences listed in the specification, and where the first polypeptide binds to the second polypeptide. A complex of the invention has virucide and cytostatic activity, and may have a use as vaccine. The complex is useful for identifying agents for treating or preventing a conditions involving altered points for the complex, e.g. human papilloma virus (HPV) infection, or cancer. The compositions, antibodies, vectors and methods are useful for treating such diseases. The sequences shown in ADF09584-ADF09697 represent cDNA's of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New purified complex comprising a first polypeptide and a second polypeptide, useful for identifying agents for treating/preventing a condition involving altered level of the complex e.g. human papilloma virus infection, or cancer.
Selective post-transcriptional silencing of an exogenous viral gene (e.g. human papilloma virus (HPV) E6), for treating e.g. cancer, comprises using a small interfering RNA (siRNA) construct homologous to an mRNA of
                                                                                                                                                                                                                                                                                                                                                                            17-JUL-2001; 2001GB-00017358.
14-JAN-2002; 2002GB-0000688.
17-JUN-2002; 2002GB-00013855.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            E6 siRNA sequence
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Pred. No.
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RESULT 11
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ID AAL54
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XX AAL54
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XW Viruc
XW Selec
XW human
XW small
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XX I7-JI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local (
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                                                                                                                                                               Selective post-transcriptional silencing of an exogenous viral gene (e.g. human papilloma virus (HPV) E6), for treating e.g. cancer, comprises using a small interfering RNA (siRNA) construct homologous to an mRNA of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-JUL-2001; 2001GB-00017358
14-JAN-2002; 2002GB-00000688
17-JUN-2002; 2002GB-00013855
                                                                  Claim 11; Fig
                                                                                                                                                                                                                                                                                             WPI; 2003-221850/21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-JUL-2002; 2002WO-GB003300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human papilloma virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HPV16 E6 siRNA derived DNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                        (MILN/) MILNER A J.
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                                                               11; 44pp; English
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0.034;
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RESULT 12
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Best Local S
                               epithelial cell strain in which an exogenous immortalizing gene is introduced and the properties of the cell line as non-cancer typical glandular epithelial cells, are maintained. The cell line of the invention may be useful for research of reproduction, particularly for analyzing the adhesion of the fertilized egg during implantation, analyzing the effect of steroid hormones, analyzing the mechanism of multistep canceration of the inner glandular epithelial membrane by genetic engineering of the cell line which is otherwise non-cancerous, and analyzing the effect of carcinogenic substances on the cell line. The cell line mich is otherwise mon-cancerous, and analyzing the effect of carcinogenic substances on the cell line.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             silencing in a mammalian cell of the expression of an exogenous gene of viral origin. The method comprises introducing into the cell a small interfering RNA (siRNA) construct that is homologous to a part of the mRNA sequence of the gene. The method is useful for the selective post-transcriptional silencing of an exogenous gene of viral origin (e.g. an oncogene or human papilloma virus (HPV) gene) in a mammalian cell. The method or the siRNA is particularly useful for treating cancer, human cervical cancer, human immunodeficiency virus (HTV), smallpox, flu, common cold, or a disease caused by a HPV (e.g. genital warts, cervical cancer, penile cancer, malignant squamous cell carcinomas or vertuca vulgaris). An siRNA construct or vector is useful for use as a medicament for the diseases mentioned. The polynucleotide sequence of the invention can be used to treat disorders by gene therapy. This polynucleotide sequence represents the DNA of a HPV siRNA sequence of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Immortalized endometrial glandular epithelial cell strain containing exogenous immortalizing gene and maintains properties of non-cancer and typical glandular epithelial cells, useful in field of research or typical glandular epithelial cells, useful in field of research or typical glandular epithelial cells, useful in field of research or typical glandular epithelial cells, useful in field of research or typical glandular epithelial cells, useful in field of research or typical glandular epithelial cells, useful in field of research or typical glandular epithelial cells, useful in field of research or typical glandular epithelial cells, useful in field of research or typical glandular epithelial cells, useful in field of research or typical glandular epithelial cells, useful in field of research or typical glandular epithelial cells, useful in field of research or typical glandular epithelial cells, useful in field of research or typical glandular epithelial cells, useful in field of research or typical glandular epithelial cells, useful in field of research or typical glandular epithelial cells, useful in field of research or typical glandular epithelial cells, useful in field of research or typical glandular epithelial cells, useful in field of research or typical glandular epithelial cells, useful in field of research or typical glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular epithelia glandular e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to a novel immortalized endometrial glandular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 4; SEQ ID NO 3; 22pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2005-175815/19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-JUL-2003; 2003JP-00283911.
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                                                                                                                                                                                                                                                 The present invention relates to a method and composition comprising a transfer agent and a solid or colloidal carrier medium for delivering biological agents into cells. The invention is useful for the treatment of cancer, tumor, carcinoma of cutaneous, squamous or cervical epithelia and colorectal carcinoma, wounds, burns and scars. The invention is also useful in gene therapy. The present sequence is the human papillomavirus type 16 E6/E7 gene fragment. This sequence is useful in a method for
                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Composition useful for delivering an agent into a cell comprises agent, a transfer agent and a solid or colloidal carrier medium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               injury; infection; cancer; gastrointestinal disease; gyneocology and obstetrics; tumor; colorectal tumor; uterine cervix tumor; squamous cell carcinoma; neopli
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                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure;
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11-JAN-1997
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                immunogenicity of, the fusion protein. This sequence encodes a fusion between the C-terminal end of E6 and the N-terminal end of E7. The protein is also a deletion mutant generated from the sequence describe in AAT31833. (Updated on 27-AUG-2003 to correct OS field.)
     Zhao Q;
                                                                                                             24-APR-2002; 2002CN-00117143
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            human papillomavirus; cervix cancer; ds
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        E6 and/or E7 protein, prevent HPV infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Vaccine variants of human papilloma virus antigens - contain variants of E6 and/or E7 protein, pref. deletion mutants, and are used to treat or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      P-PSDB; AAR97562
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                                                          INST ONCOLOGY TUMOR HOSPITAL CHINESE ACA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention relates to human papillomavirus E6/E7 fusion gene, its preparing process, the process for configuring the efficient expression carrier containing the gene and resultant expression carrier, the fusion protein prepared from the gene, and the application of the fusion gene and expression protein to medical science and medicine to treat cervix cancer are disclosed. The present sequence represents the human papillomavirus fusion gene encoding sequence.
                                                                                                                                                                                                                                                                                                                                                                                     16-OCT-2003
25-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human papillomavirus E6/E7 fusion gene carrier and fusion protein vaccine.
                              Human papilloma virus detection assay - by amplification using sustained sequence replication and hybridisation with a detector
                                                                                                                                                                                                                                                                                                                         HPV; HPV16; E6 cervix cancer;
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                                                                                            Brown
                                                                                                                                   06-MAY-1993;
                                                                                                                                                       06-MAY-1994;
                                                                                                                                                                                                                                                                                                     Human
                                                                                                                                                                                                                                                                                                                                                                                                                                        AAQ75470 standard; DNA; 570
          Disclosure; Page 24-26;
                                                             P-PSDB; AAR63865
                                                                        WPI; 1995-006821/01.
                                                                                                               (BAXT ) BAXTER
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DB; ADF31985.
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                                                                                                              DIAGNOSTICS INC
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Best Local Similarity
                                               The patent is for a rapid in situ hybridisation assay for detecting and typing human papilloma virus (HPV) in non-frozen cellular smears fixed to a support in absence of aldehyde-based crosslinking reagents. The assay comprises: (1) combining nucleic acid in the sample with at least one detectable probe able to hybridise with 1 or more HPV types; and (2) detecting presence or absence of hybrid complexes. Opt. several probes are used, eg one for HPV types 6 and 11, associated with benign warts, and one for types 16, 18, 31, 33 and 35, associated with cervical cancer. The assay can differentiate between HPV types. It is esp. used as a secondary test. The probes can be synthesised or cloned. (Updated on 27-AUG-2003 to correct OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The sequences of the E6 and E7 polypeptide-encoding regions of human papillomavirus (HPV) 16 and 18 are given in AAQ75470-71 and the encoded proteins in AAR63865-66, respectively. Probes and primers based on these sequences were used for HPV infection diagnosis, expression of E6 and E7 is diagnostic for cervical cancer or pre- malignant states. (Updated on 25-MAR-2003 to correct PN field.) (Updated on 16-OCT-2003 to standardise
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hybridisation test for human papilloma virus in cell smears - with long labelled probe specific for particular virus types, examining cervical smears.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 570 BP; 199 A; 93 C;
                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page ?; 39pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1989-114406/15.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human papilloma cellular smear;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Partial nucleotide sequence 16 (HPV-16).
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17-JUL-1990
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAN91600 standard; DNA; 712
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(first entry)
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Pred. No. 0.
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wart; ce
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   159 T; 0 U; 0 Other;
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Query Match Best Local Similarity

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Mismatches

Score 28; Pred. No.

DB 1;

Length 712

Indels

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Gaps

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0 Other;

Sequence

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BP;

253 A; 120 C; 155 G; 184 T; 0 U;

Matches

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GAACAGCAATACAACAAACCGTTGTGTG

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RESULT 18
ADO44067
ID ADO44
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                               Query Match
Best Local S
Matches 28
                                                                                                                      The present sequence encodes an E7E6 fusion protein, comprising wild type E7 and E6 polypeptides from human papillomavirus type 16 (HPV16). The specification describes human papillomavirus E6 and E7 polypeptides, where the E7 polypeptide has mutations at any one or more of the amino acids corresponding to amino acids 24, 26 or 91 of the sequence given in ADO44073 and the E6 polypeptide has no mutations or has mutations at any one or more of the amino acids corresponding to amino acids 3 or 106 of there sequence given in ADO44072. The polypeptides of the invention are useful for treating or preventing human papillomavirus (HPV)-associated cancers, such as cervical cancer. The fusion proteins and nucleic acids encoding the fusion proteins are useful for treating immune responses against HPV. They are also useful for treating lower gastrointestinal tract cancers, e.g. anal cancer, and other cancers of the reproductive system, including penile and vulvar cancer.
                                                                                                                                                                                                                                                                                                                                                                                                New polypeptide comprising human papillomavirus E6 and useful for treating or preventing human papillomavirus cancers, e.g. cervical cancer.
                                                                                             Sequence 747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Smith L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO2004030636-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   E6 protein; E7 protein; fusion protein; HPV16; HPV-associated cancer; cervical cancer; immune response; lower gastrointestinal tract cancer; anal cancer; reproductive system cancer; penile cancer; vulvar cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nucleotide
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                                                                                                                                                                                                                                                                                                                                                                   Example 1; Page 73; 101pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    P-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                03-OCT-2002; 2002US-0415929P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human papillomavirus type 16.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 368
1 GAACAGCAATACAACAAACCGTTGTGTG 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADO44066.
                                              Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cassetti MC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sequence of an E7E6 fusion protein.
                                 Conservative
                                                                                           BP; 247
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /product= "E7E6 fusion protein"
                                              100.0%; Score 28; 100.0%; Pred. No.
                                                                                             A; 132 C; 166 G; 202 T; 0 U;
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                               Mismatches
                                              0.036;
                                                             DB 12; Length 747;
                               Indels
                                                                                             0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                  E7 polypeptides, (HPV) -associated
                               0
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1 GAACAGCAATACAACAAACCGTTGTGTG 28

Query Match Best Local S Matches 28

. Similarity 28; Conserv

Conservative

100.0%; 0,

Score 28; DB 12 Pred. No. 0.036; Mismatches

DB 12; Length 747; 0

Indels

<u>.</u>

Gaps

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Sequence

747 BP; 246 A; 132 C; 171 G; 198 T; 0 U; 0 Other;

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RESULT 19
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ID 44065
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                                                     The present sequence encodes a fusion protein, comprising E6 and E7

polypeptides from human papillomavirus type 16 (HPV16). The fusion

protein is designated E6E7PentM, and comprises an E6 amino terminus

(where residues 63 and 106 have been replaced with glycine) and an E7

carboxy terminus (where residues 24, 26 and 91 have been replaced with
glycine). E6E7PentM is representative of fusion proteins of the

cinvention. The specification describes human papillomavirus E6 and E7

polypeptides, where the E7 polypeptide has mutations at any one or more

of the amino acids corresponding to amino acids 24, 26 or 91 of the

sequence given in AD044073 and the E6 polypeptide has no mutations or has

mutations at any one or more of the amino acids corresponding to amino

acids 63 or 106 of there sequence given in AD044072. The polypeptides of

the invention are useful for treating or preventing human papillomavirus

(HPV)-associated cancers, such as cervical cancer. The fusion proteins

and nucleic acids encoding the fusion proteins are useful for generating

immune responses sgainst HPV. They are also useful for treating lower

cyastrointestinal tract cancers, e.g. anal cancer, and other cancers of

the reproductive system, including penile and vulvar cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New polypeptide comprising human papillomavirus E6 and E7 polypeptides, useful for treating or preventing human papillomavirus (HPV)-associated cancers, e.g. cervical cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 E6 protein; E7 protein; fusion protein; HPV16; HPV-associated cancer; cervical cancer; immune response; lower gastrointestinal tract cancer; anal cancer; reproductive system cancer; penile cancer; vulvar cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Page 71; 101pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cassetti MC
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RESULT 20
ADO44061
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                                                             Matches
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                              New polypeptide comprising human papillomavirus E6 and E7 polypeptides, useful for treating or preventing human papillomavirus (HPV)-associated cancers, e.g. cervical cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Smith L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              03-OCT-2002; 2002US-0415929P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B6 protein; E7 protein; fusion protein; HPV16; HPV-associated cancer; cervical cancer; immune response; lower gastrointestinal tract cancer
                                                                                                                         Sequence 747 BP; 247 A; 132 C; 166 G; 202 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                 Example 1; Page 68; 101pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nucleotide sequence of an E6E7 fusion protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADO44061;
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                                                                           Similarity
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                              GAACAGCAATACAACAAACCGTTGTGTG 28
GAACAGCAATACAACAAACCGTTGTGTG 292
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Pred. No. 0.036;
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Matches
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Best Local Similarity
                                                                                                                                                                                                                                                                        Sequence 747 BP; 246 A; 132 C; 170 G; 199 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New polypeptide comprising human papillomavirus E6 and E7 polypeptides, useful for treating or preventing human papillomavirus (HPV)-associated cancers, e.g. cervical cancer.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15-JUL-2004
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GAACAGCAATACAACAAACCGTTGTGTG 292
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                                                                                                                             100.0%; Score 28; DB 12; Length 747; 100.0%; Pred. No. 0.036; tive 0; Mismatches 0; Indels
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556 GAACAGCAATACAACAAACCGTTGTGTG 583

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RESULT 22
ADO44069
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                                                                                                                          The present sequence encodes a fusion protein, comprising E7 and E6 CC polypeptides from human papillomavirus type 16 (HgV16). The fusion CC protein is designated E7E6TetM, and comprises an E7 amino terminus (where CC residues 24 and 26 have been replaced with glycine) and an E6 carboxy CC E7E6TetM is representative of fusion proteins of the invention. The specification describes human appillomavirus E6 and E7 polypeptides, CC where the E7 polypeptide has mutations at any one or more of the amino acids corresponding to amino acids 24, 26 or 91 of the sequence given in CC AD044073 and the E6 polypeptide has no mutations or has mutations at any CC one or more of the amino acids corresponding to amino acids 63 or 106 of there sequence given in AD044072. The polypeptides of the invention are useful for treating or preventing human papillomavirus (HPV)-associated CC cancers, such as cervical cancer. The fusion proteins and nucleic acids cancers, such as cervical cancer. The fusion proteins and nucleic acids capainst HPV. They are also useful for treating lower gastrothtestinal tract cancers, e.g. anal cancer, and other cancers of the reproductive concerns, including penile and vulvar cancer.
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                                                                                                                        Sequence 747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 24; Page 74-75; 101pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Smith L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   03-OCT-2002; 2002US-0415929P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (AMHP ) WYETH HOLDINGS CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2004-316328/29.
1 GAACAGCAATACAACAAACCGTTGTGTG 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADO44068
                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cassetti MC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sequence of a fusion protein designated E7E6TetM
                                                       Conservative
                                                                                                                          BP; 246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               reproductive system cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /product= "E7E6TetM fusion protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         *tag= a
                                                                      100.0%; Score 28; DB 12; Length 747; 100.0%; Pred. No. 0.036;
                                                                                                                        A; 132 C; 170 G; 199 T; 0 U;
                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP.
                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gastrointestinal tract cancer;
penile cancer; vulvar cancer;
                                                       Indels
                                                                                                                          0 Other;
                                                     0
                                                     Gaps
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GAACAGCAATACAACCAAACCGTTGTGTG 28

Query Match Best Local S Matches 28

Similarity

100.0%; Score 28; DB 12 100.0%; Pred. No. 0.036;

DB 12;

Length 747; Indels

0

Gaps

0

Conservative

0,

Mismatches

Sequence 747 BP; 246 A; 132 C; 171 G; 198 T; 0 U; 0 Other;

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RESULT 23
AD044071
IID AD0444
XX AD0444
XX AD044
XX AD044
XX E6 pr
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                                                                                                   The present sequence encodes a fusion protein, comprising E7 and E6 copypeptides from human papillomavirus type 16 (HPV16). The fusion protein is designated E758FentM, and comprises an E7 amino terminus (where residues 24, 26 and 91 have been replaced with glycine) and an E6 coarboxy terminus (where residues 63 and 106 have been replaced with glycine) and E7 cycline). E7E6FentM is representative of fusion proteins of the invention. The specification describes human papillomavirus E6 and E7 polypeptides, where the E7 polypeptide human papillomavirus E6 and E7 polypeptides, where the E7 polypeptide has mutations at any one or more of the amino acids corresponding to amino acids corresponding to amino acids corresponding to amino acids corresponding to amino acids corresponding to amino acids corresponding to amino acids corresponding to amino acids 63 or 106 of there sequence given in ADO44072. The polypeptides of the invention are useful for treating or preventing human papillomavirus (HPV)—associated cancers, such as cervical cancer. The fusion proteins and nucleic acids encoding the fusion proteins are useful for treating lower immune responses against HPV. They are also useful for treating lower the support of the cancers of the arrorductive system including realise and vulvar cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New polypeptide comprising human papillomavirus E6 and useful for treating or preventing human papillomavirus cancers, e.g. cervical cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 E6 protein; E7 protein; fusion protein; HPV16; HPV-associated cancer; cervical cancer; immune response; lower gastrointestinal tract cancer; anal cancer; reproductive system cancer; penile cancer; vulvar cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  P-PSDB; ADO44070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2004-316328/29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                03-OCT-2002; 2002US-0415929P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        02-OCT-2003; 2003WO-US031726.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human papillomavirus type 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nucleotide sequence of a fusion protein designated E7E6PentM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADO44071;
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                                                                           the reproductive system, including penile and vulvar cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO2004030636-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (AMHP ) WYETH HOLDINGS CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24; Page 76; 101pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cassetti MC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /product= "E7E6PentM fusion protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  E7 polypeptides, (HPV)-associated
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                                         CC sequence for prew protein of dengue virus and also includes elements of ce.g. the non-coding region in the whole of the 5-end, the coding region of the front 20 amino acids in the C protein, and the coding region of co of the front 20 amino acids in the C protein, and the coding region of co obtained vaccines are useful in producing preventives or/and remedies for concer like cervical cancer and viral diseases. Such vaccines can cefficiently express antigen in infected cells, which is because dengue co virus can infect dendritic cells, and can effectively present antigen to provide immunity effect. Different types of dengue virus can be used to crepatedly produce efficient immune response thereby strengthening the body's immune system against the pathogen that contains such antigen. CC thuman papillomavirus (HPV) vaccines were prepared by using a genecupressing system using of the full-length dengue virus cDNA clone (pRK/FLD2). The recombinant virus vectors were transfected into baby can first sequence corresponds to the HPV type 16 E7 gene used as the contains of interest in the recombinant vector of the invention.
                                                                                                                                                                                                                                                                                                                                                                                 Virus-like particle vaccines containing dengue virus recombinant replicon as core for carrier, applicable in preventives or/and remedies for tumors like cervical cancer and viral diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ds; gene; cytostatic; virucide; dengue virus; recombinant replicon; deletion; preM protein; C protein; NSI protein signal; vaccine; cervical cancer; viral disease; antigen; dendritic cell; immune reshuman papillomavirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-625870/60.
P-PSDB; ADR47005.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-JAN-2004; 2004WO-CN000088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO2004072274-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADR47004 standard; DNA; 768
                                                                                                                                                                                                                                                                                                                                                  Example 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENBANK; AF486352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pang X;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-JAN-2003; 2003CN-00115272.
30-JAN-2003; 2003CN-00115273.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-NOV-2004
 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (SHAN-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       papillomavirus type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SHANGHAI TENGEN BIOMEDICAL CO LTD TENGEN BIOMEDICAL CO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BEIJING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            768 BP; 255 A; 139 C; 172 G; 202 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                SEQ ID NO 1; 38pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORIENTAL TENGEN TECHNOLOGY DEV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /product= "HPV-16 E7 protein"
                                  in the recombinant replicon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16 E7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         for Dengue virus vaccine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            583
                                  of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cell; immune response;
                                  invention.
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Query Match

100.0%;

Score 28;

DB 13;

Length 768

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RESULT 25
AEF40156
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                                                         Best
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                                                                      Query Match
                                                                                                                  The present invention provides a virus-like particle (VLP) vaccine which contains dengue virus (DEN) recombinant replicon as its core. The DEN replicon contains exogenous nucleotide sequences such as human papillomavirus (HPV) antigen proteins, immune regulators or combination of HPV antigen and immune regulators. The invention is useful for producing a drug for the prophylaxis and treatment of cancer or viral infection. The present sequence is a human papillomavirus oncogene.
                                                                                                                                                                                                                                                                                                                                                                                         30-JAN-2003; 2003CN-00115272.
30-JAN-2003; 2003CN-00115273.
30-JAN-2004; 2004WO-00072274.
                                                                                             Sequence
                                                                                                                                                                                                                                                     New recombinant DEN replicons with a deletion of preM, useful for producing a drug for the prophylaxis and treatment of cancer or vi
                                                                                                                                                                                                                                                                                                        WPI; 2006-109169/11.
P-PSDB; AEF40157.
                                                                                                                                                                                                                                                                                                                                           Pang X;
                                                                                                                                                                                                                                                                                                                                                                                                                                            29-JUL-2005; 2005US-00192923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-JAN-2006.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human papillomavirus type 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        coding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Vaccine; virus-like particle; replicon; therapeutic; cancer; cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human papillomavirus 16 (HPV-16) E7-E6 oncogene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23-MAR-2006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AEF40156;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AEF40156 standard; DNA; 768
                                                                                                                                                                                                                   Example 2;
                                                                                                                                                                                                                                                                                           GENBANK; AF486352, AF469197, AF472508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US2006018928-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      neoplasm; viral infection; virucide; infection; oncogene;
                                                                                                                                                                                                                                                                                                                                                                    (PANG/) PANG
                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                580 GAACAGCAATACAAACCGTTGTGTG 607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 GAACAGCAATACAACAAACCGTTGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sequence; ds.
                 GAACAGCAATACAACAAACCGTTGTGTG 28
 GAACAGCAATACAACAAACCGTTGTGTG 607
                                                                                             768 BP;
                                                                                                                                                                                                                 SEQ ID NO 1; 24pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                    ×
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                                                                                              255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             oncoprotein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       product = "Human papillomavirus 16 (HPV-16) E7-E6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      partial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               . 768
                                                        100.0%; Score 28; DB 15
100.0%; Pred. No. 0.036;
                                                                                             A; 139 C; 172 G; 202 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "No stop codon"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g)
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; Mismatches
                                               Mismatches
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                                                                       15;
                                                                                             0 U;
                                               0,
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                                                                       Length
                                                                                               0 Other;
                                                 Indels
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                                                                       768;
                                               0
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                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                          viral
                                               0,
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RESULT 26
AAT14663
27-AUG-2003
25-MAR-2003
10-OCT-1996
                                       Detection of low copy number intracellular markers - of target RNA in fixed cells then hybridisation with detecting human papilloma virus in cervical cells.
                                                                                                                                                                                                                                                      primer_bind
                                                                                                                                                                                                                                                                               primer_bind
                                                                                                                                                                                                                                                                                                       primer_bind
                                                                                                                                                                                                                                                                                                                              primer_bind
                                                                                                                                                                                                                                                                                                                                                                                                       misc_binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human papilloma virus; HPV; detection; cervical cancer; amplification; hybridisation; diagnosis; transformed cell; E6; E7; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAT14663;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAT14663 standard;
                       Example 2;
                                                                                                                                                       09-APR-1996.
                                                                                                                                                                                                      primer_bind
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                                                                        WPI; 1996-200273/20.
                                                                                        Haydock
                                                                                                                        10-DEC-1991;
                                                                                                                                       22-MAR-1994;
                                                                                                                                                                        US5506105-A
                                                                                                        (DADE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                       papillomavirus type
                                                                                                        DADE
                                                                                         P۷;
                       Fig 3;
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/note= "Primer I
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/note= "Primer |
660. .683
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715. .738
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/note= "Primer
658. .681
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                       21pp; English.
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An in situ hybridisation assay for detecting an intracellular marker low copy number in cells comprises fixing the cells to a support usi

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05-JAN-1998;
17-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               paraformaldehyde; treating the cells with a protease to permeabilise them without altering morphology; adding amplification reagents; incubating the cells at below fifty degrees celsius to perform amplification by self sustained sequence replication; adding a labelled probe complementary to the region between the primers; washing cells to remove unhybridised probe and then detecting the labelled probe. The E6/E7 region of human papilloma virus (HPV) I6 is used especially to detect mRNA being transcribed from this region which becomes active in transformed cells. The method can be used for the early diagnosis of cervical cancer. Primers used to amplify fragments of the E6/E7 region are described in AAT14664-T14674. (Updated on 25-MAR-2003 to correct PF field.) (Updated on 27-AUG-2003 to correct OS field.)
                                                                            This nucleotide probe is specific for the HPV16 Human Papilloma Virus (HPV) gene. The degree of HPV infection can be assessed, by measuring the levels of expression of genes involved in the diseased state, and comparing the expression to each other or to reference genes. (Updated on 27-AUG-2003 to correct OS field.)
                                                   Sequence 779
                                                                                                                                                                                                   New method
                                                                                                                                                                                                                          WPI; 1999-443850/37.
                                                                                                                                                                                                                                                                                                                                                              11-DEC-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Probe sequence for HPV 16 E6/E7
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12-OCT-1999
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                                                                                                                                                         Disclosure; Fig 5; 35pp; English.
                                                                                                                                                                                   comparison
                                                                                                                                                                                                                                                      Lorincz
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Score 28; DB
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                                                    G; 211
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25-MAR-2003 (
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The fragment of DNA contg. the HPV-16 E6/E7 coding region was prepd. by PCR from plasmid pBR322/HPV16 (Durst et al., PNAS, 80: 3812 (1983)) using oligonucleotides SO5 and SO6. The DNA prod. has a site for Nco1 at the beginning of the E6 gene and a Smal site immediately downstream of the termination codon for E7. The E6 and E7 ORFS are fused together to form a single continuous ORF via site directed mutagenesis and the immortilising potential of E7 is removed by altering two key codons of the HPV E7 sequence. The single ORF of HPV-16 E6/E7 may be inserted into vaccinia virus DNA at neutral sites (pref. by inserting two sets of the DNA in opposite orientations to overcome the problem of intertypic recombination) to make a recombinant virus vector for use
                                                                                                                                                                                               Recombinant virus vectors encoding human papillomavirus proteins - for treating and vaccinating against HPV infections and conditions caused by
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                                                                                                                                                                                                                                              WPI; 1992-349219/42
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA encoding
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/note= "second reading
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/note= "third reading frame
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/note= "reading
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                                                                              A variant of the human papilloma virus (HPV) 86 or 87 protein which elicits a humoral and/or cellular immune response against HPV can be used in vaccines against HPV or to treat HPV infection. The variant is preferably a deletion mutant comprising at least half, and preferably two thirds of full length 86 or 87 protein starting from the N- or C- terminal, or is a full length 86 moiety fused to a full length 87 moiety. The variant optionally has a linkage moiety and a foreign protein or peptide which facilitates the purification of, and enhances the immunogenicity of, the fusion protein. This sequence encodes a full length 86/87 fusion protein. (Updated on 27-AUG-2003 to correct OS
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Vaccine variants of human papilloma virus antigens - contain variants of E6 and/or E7 protein, pref. deletion mutants, and are used to treat or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-AUG-2003
10-JAN-1997
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                                                                                                                                                                                                                                                                                                                                                                                                                                  E6 and/or E7 protein, prevent HPV infection.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human papilloma virus E6/E7 protein variant.
                                                          length
field.)
                                                                                                                                                                                                                                                                                                                                                                                Example 1; Page 15-16; 37pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         P-PSDB; AAR97561.
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UNIV QUEENSLAND.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         standard; DNA; 801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cox J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94AU-00000157
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "E6/E7 fusion protein."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP.
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Frazer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.036;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               response;
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Query Match Best Local Similarity

100.0%;

Score 28; DB 2; Pred. No. 0.036;

Length 801

Sequence

801 BP; 266 A; 150 C; 174 G; 211 T; 0 U; 0 Other;

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RESULT 31
AAX29781
ID AAX29
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AC AAX29
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DT 17-OC
DT 22-JU
XX
DE Prot.
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                                                                                                                                                Query Match
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Matches 28
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                  17-OCT-2003
22-JUN-1999
                                                                                                                                                                                                   AAX78791-X78801 represent nucleic acid sequences which encode novel constructs comprising an E6 or E7 protein or E6/E7 fusion protein from HPV (represented in AAY25375-Y25386). These constructs are optionally linked to an immunological fusion partner and an immunomodulatory CpG oligonuclectide. The products of the invention can be used to induce an immune response in a patient to an HPV antigen. They can also be used for preventing or treating HPV induced tumours
                                                                                                                                                                                                                                                                                                                                                   Dalemans WLJ, Gerard CMG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAX78792 standard;
Prot.D1/3-E6-His/HPV16 coding sequence.
                                              AAX29781;
                                                              AAX29781 standard;
                                                                                                                                                                                    Sequence 822 BP; 277 A; 147 C; 168 G; 230 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                           Example II; Page 48; 62pp; English.
                                                                                                                                                                                                                                                                                           composition comprising an induce immune response to
                                                                                                                                                                                                                                                                                                                                                                                                         18-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                           08-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                             W09933868-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HPV antigen; prevention; treatment; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Fusion protein; E6 protein; E7 protein; E6/E7; immunomodulator; tumour; immunological fusion partner; CpG oligonucleotide; immune response;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HPV fusion protein D1/3-E6-His/HPV16 DNA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human papillomavirus.
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                                                                                                                                                 28;
                                                                                                                                                         Similarity
                                                                                                                        GAACAGCAATACAACAAACCGTTGTGTG 28
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                  (revised)
(first entry)
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                                                                DNA;
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                                                                822
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RESULT 32
AED52633
ID AED52
XX AED52
XX AED52
XX 29-DE
XX Pusio
XX Fusio
XX Ingan
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Best Local S
Matches 28
                                                                                                                                                                         This sequence represents the coding region for a chimeric E6 or E7 protein or E6/E7 fusion protein from Human papillomavirus (HPV) linked t an immunological fusion partner, in this case, a fragment of the Haemophilus influenzae B protein D. The sequence also contains a histidine tag at the C-terminus of the encoded protein. The protein can be used in a vaccine, for immuno-therapeutically treating HPV induced tumour lesions (benign or malignant) and preventing HPV viral infection. (Updated on 17-OCT-2003 to standardise OS field)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human papillomavirus. Haemophilus influenzae. Chimeric.
                    IN9801903-I4.
                                                                                                                                                                                                                                                               Pusion protein; vaccine; papilloma; cytostatic; papillomavirus infection; virucide; uterine cervix tumor; E6; ds; gene; D protein.
                                                                                                                                                                                                                                                                                                                         Fusion protein D1/3-E6-His/HPV16, DNA.
                                                                                                                                                                                                                                                                                                                                                                   29-DEC-2005
                                                                                                                                                                                                                                                                                                                                                                                                           AED52633;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 AED52633 standard, DNA, 822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 822 BP; 277 A; 147 C; 168 G; 230 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Fig 3; 95pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human Papilloma Virus (HPV) fusion proteins - useful in vaccines treatment or prophylaxis of HPV induced lesions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1999-190587/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bruck C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22-AUG-1997;
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                                                                                                                                                              Chimeric.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Lombardo-Bencheikh A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (SMIK ) SMITHKLINE BEECHAM BIOLOGICALS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   604 GAACAGCAATACAAACCGTTGTGTG 631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GAACAGCAATACAACAAACCGTTGTGTG 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2h 100.0%; Score 28; DB 2; Similarity 100.0%; Pred. No. 0.037; 28; Conservative 0; Mismatches (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cabezon Silva T,
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                                                          /*tag= a
/product= "Fusion protein
                                                                                                                     Location/Qualifiers
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                                                              D1/3-E6-His/HPV16"
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linked to
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RESULT 33
AAX78795
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Best Local S
Matches 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to human Papilloma virus (HPV) fusion proteins, linked to an immunological fusion partner that provides T helper epitopes to the HPV antigen. Vaccine formulations comprising the fusion proteins are useful in the treatment or prophylaxis of HPV induced lesions (papillomas, warts and cervical cancer). HPV 16 (and HPV 18) E6 and E7 proteins (singly, as an E6-E7 fusion or mutated) were fused to either Haemophilus influenzae D protein (20-127), the C-terminus of Streptococcus pneumoniae Lyra protein (CLyra) or thioredoxin. The present sequence encodes an HPV-H. influenzae D protein, fusion protein of the
Composition comprising induce immune response
                                                                                                                                                                                                                                                                                                                                                 AAX78795 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 822 BP; 277
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                                                                                                                                                       08-JUL-1999.
                                                                                                                                                                             WO9933868-A2
                                                                                                                                                                                                              Synthetic.
                                                                                                                                                                                                                                                        Fusion protein;
                                                                                                                                                                                                                                                                              HPV fusion protein CLYTA-E6-His/HPV16 DNA.
                                                                                                                                                                                                                                                                                                       06-SEP-1999
                                                                                                                                                                                                                                                                                                                            AAX78795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Vaccine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tyrrell
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                                                                 Dalemans WLJ,
                                                                                                                                                                                                 Human papillomavirus
                                                                                       (SMIK ) SMITHKLINE BEECHAM BIOLOGICALS
                                                                                                                                                                                                                                               Lommunol
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (SMIK)
                                                                                                                                                                                                                                  antigen;
                                            1999-405485/34.
                                                                                                                                                                                                                                                                                                                                                                                                          604
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                                                                                                                                                                                                                                               .ogical
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
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                                   AAY25379
                                                                                                                                                                                                                                                                                                                                                                                                         GAACAGCAATACAACAAACCGTTGTGTG 631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Fig 3; 96pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                 l fusion partner; CpG oligo prevention; treatment; ss.
                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                            fusion
                                                                 Gerard
                                                                                                            97GB-00027262.
                                                                                                                                 98WO-EP008563.
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                                                                                                                                                                                                                                              E6 protein; E7 protein; E6/E7; immunomodulator; tumour;
usion partner; CpG oligonucleotide; immune response;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; 147 C; 168 G; 230 T; 0 U;
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Pred. No.
            87
            õ
            E6/E7
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            fusion
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           protein
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            from
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RESULT 34
AAX29784
ID 29784
ID 20798
AC AAX29
AC AAX29
DT 117-OC
DT 22-UU
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KW Chime
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                   This sequence represents the coding region for a chimeric E6 or E7 protein or E6/E7 fusion protein from Human papillomavirus (HPV) linked to an immunological fusion partner, in this case, a fragment of the streptococcus pneumoniae CLYTA protein. The sequence also contains a histidine tag at the C-terminus of the encoded protein. The protein can be used in a vaccine, for immuno-therapeutically treating HPV induced tumour lesions (benign or malignant) and preventing HPV viral infection. (Updated on 17-OCT-2003 to standardise OS field)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAX78791-X78801 represent nucleic acid sequences which encode novel constructs compxising an E6 or E7 protein or E6/E7 fusion protein from HPV (represented in AAY25375-Y25386). These constructs are optionally linked to an immunological fusion partner and an immunomodulatory CpG oligonucleotide. The products of the invention can be used to induce an immune response in a patient to an HPV antigen. They can also be used for
                                                                                                                                                                                                                                                                                                     Disclosure; Fig 10; 95pp; English.
                                                                                                                                                                                                                                                                                                                                                        Human Papilloma Virus (HPV) fusion proteins - useful in vaccines for treatment or prophylaxis of HPV induced lesions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bruck C, Cabezon Silva Lombardo-Bencheikh A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human papillomavirus.
Streptococcus pneumon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLYTA-E6-His coding sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-OCT-2003
22-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAX29784;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAX29784 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           preventing
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                                                                                                                                                                                                                                                                                                                                                  treatment or prophylaxis
                                                                                                                                                                                                                                                                                                                                                                                                                                       P-PSDB; AAY02635.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1999-190587/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-MAR-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO9910375-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chimeric;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chimeric.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              lesion;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (SMIK ) SMITHKLINE BEECHAM BIOLOGICALS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  661 GAACAGCAATACAACAAACCGTTGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 GAACAGCAATACAACAAACCGTTGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              benign;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
     879 BP; 289 A; 168 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     879 BP; 289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            E6; E7; fusion protein; enign; malignant; virus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              or treating HPV induced tumours
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Page 52; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (revised)
(first en
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               pneumoniae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                97GB-00017953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         98WO-EP005285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Score 28;
100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; 168 C; 209 G; 213 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             879
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Delisse AEF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
     209 G; 213 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLYTA; vaccine; infection; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gerard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              immunotherapy; tumour;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
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Query Match

100.0%;

Score 28;

DB

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Length 879;

Sequence

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RESULT 36
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Best Local S
Matches 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 100 Matches 28; Conservative
                                                                                                                                                                                      The invention relates to human Papilloma virus (HPV) fusion proteins, linked to an immunological fusion partner that provides T helper epitopes to the HPV antigen. Vaccine formulations comprising the fusion proteins are useful in the treatment or prophylaxis of HPV induced lesions (papillomas, warte and cervical cancer). HPV 16 (and HPV 18) E6 and E7 proteins (singly, as an E6-E7 fusion or mutated) were fused to either Haemophilus influenzae D protein (20-127), the C-terminus of Streptococcus pneumoniae Lyth protein (CLYLA) or thioredoxin. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pusion protein; vaccine; papilloma; cytostatic; papillomavirus infection; virucide; uterine cervix tumor; E6; ds; gene; LytA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AED52641 standard; DNA; 879 BP.
                                                                                                                                                     Sequence 879 BP; 289 A; 168 C; 209 G; 213 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                         Example 10; Fig 10; 96pp; English
                                                                                                                                                                                                                                                                                                                                                                                                 Tyrrell AWR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-MAR-2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chimeric.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human papillomavirus type 16 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Streptococcus pneumoniae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Fusion protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29-DEC-2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AED52641;
                                                                                                                                                                             sequence encodes an HPV-LytA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IN9801903-I4.
                                                                                                                                                                                                                                                                                                                                                          P-PSDB; AED52642
                                                                                                                                                                                                                                                                                                                                                                                                                         (SMIK ) SMITHKLINE BEECHAM BIOLOGICALS
                                                                                                                                                                                                                                                                                                                                                                      2005-557648/57.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              661
                                                   661 GAACAGCAATACAAACAAACCGTTGTGTG 688
                                                                                                     28;
                                                                            μ
                                                                                                                 Similarity
                                                                  GAACAGCAATACAACCAAACCGTTGTGTG 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAACAGCAATACAACAAACCGTTGTGTG 688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAACAGCAATACAACAAACCGTTGTGTG 28
                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cLytA-E6-His/HPV16,
                                                                                                                                                                                                                                                                                                                                                                                                                                                  97EP-00179535.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98IN-CH001903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
1. .879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /product= "Fusion protein cLytA-E6-His/HPV16"
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                                                                                                                         100.0%;
                                                                                                                 100.0%;
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                                                                                                                 Score 28;
Pred. No.
                                                                                                                                                                             fusion protein of the invention.
                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA.
                                                                                                                 0.037;
                                                                                                                          DB 14;
                                                                                                     0
                                                                                                                             Length 879;
                                                                                                     Indels
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                                                                                                     Gaps
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                                                                                                                                                          CC The invention concerns transgenic non-human animals that express CC concogenes of interest in their epithelial cells, and materials and CC methods for their production. Expression of the oncogenes is controlled CC by a sequence from the human involucrin upstream regulatory region (see AA09476) which targets expression to desired tissues and cells (i.e. CC suprabasal stratified squamous epithelial tissue). The transgenic animals CC are useful as animal models for studying neoplastic diseases that affect CC epithelial tissues, such as those caused by the papillomavirus 16 CC oncogene E6 or E7 mucleic acid sequences and including blast affect CC optimises (e.g. epidermolytic hyperkeratinosis, Dowling-Meara disease), CC groliferative diseases (e.g. psoriasis, epidermal lysis and Bulosa CC simplex), ichthyosis disease (e.g. Ichthyosis bullosa Simens and CC colon, cervix and liver. The animal models may also be used to screen CC candidate agents for the ability to prevent or treat these diseases
                                                           Matches
                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    hINV; involucrin; regulatory region; tissue-specific; promoter; on suprabasal; stratified; squamous; epithelial tissue; animal model; neoplasia; papillomavirus 16; E6; E7; blistering; proliferative;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human papillomavirus type 16 E6
                                                                                                                     Sequence 921 BP; 308 A; 167 C; 197 G; 249 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Fig 13; 86pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Transgenic animals that express oncogenes in epithelial tissue, useful as disease models for neoplastic conditions such as psoriasis and melanomas.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eckert RL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-OCT-1998;
29-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200026343-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAA09477 standard; DNA; 921 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (UYCA-) UNIV CASE WESTERN RESERVE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       chthyosis; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000-365596/31.
434 GAACAGCAATACAACAAACCGTTGTGTG 461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        papillomavirus type 16.
              1 GAACAGCAATACAACAAACCGTTGTGTG 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Crish JF;
                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98US-0106495P.
99US-00430201.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99WO-US025516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /*tag= a
/label= E6
628. .921
/*tag= b
/label= E7
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                                                                          100.0%;
                                                           0
                                                                          Score 28; DB 3; Pred. No. 0.037;
                                                           Mismatches
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                                                           0
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                                                           0,
                                                         Gaps
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RESULT 37 AAD35101

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RESULT 38
AAQOB627
ID AAQOB
XX AAQOB
AC AAQOB
XX 24-QC
DT 21-AF
XX HPV-1
XX HPV-1
XX HPV-1
XX HPV-1
XX HPV-1
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Best Local Similarity
Matches 28; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention relates to an alphavirus vector system comprising nucleic acid derived from a human papilloma virus (HPV). The invention cells containing it, are used in treatment and prevention of cervical cancer, particularly as a vaccine. By selecting the nucleic acid that encode E6/E7 proteins without ability to bind to pRb and p53, the risk that cells infected with the alphavirus vector system may become oncogenic is avoided (contrast use of other viral vectors). The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New alphavirus system, useful for genetic cancer, comprises papilloma virus nucleic
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21-APR-1994
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 2; Fig 19; 45pp; English.
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misc_binding
                                                                                                                                                                 Human papillomavirus type 16.
                                                                                                                                                                                                                                                                                                    HPV-16 fragment.
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                                                                               misc_binding
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                                                                                  Location/Qualifiers 198. .207
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100.0%; Pred. No. 0.
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25-MAR-2003
16-MAR-1990
                                                                                                                                                                                                                                                                04-APR-1988;
31-MAR-1989;
Claim 40; Page 46; 81pp; English.
                                               Rapid detection of specific human papilloma virus genotypes -
hybridisation of DNA digest with new labelled nucleic acid pro
                                                                                                                        WPI; 1989-324314/44.
                                                                                                                                                                   George AL, Groff DE;
                                                                                                                                                                                                                                                                                                                                         04-APR-1989;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 4b; Page 4; 11pp; German.
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Pred. No. 0.037;
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RESULT 40
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Matches 28;
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                                                                                                                                     AAX78791-X78801 represent nucleic acid sequences which encode novel constructs comprising an E6 or E7 protein or E6/E7 fusion protein from HPV (represented in AAY25375-Y25386). These constructs are optionally linked to an immunological fusion partner and an immunomodulatory CpG oligonucleotide. The products of the invention can be used to induce at immune response in a patient to an HPV antigen. They can also be used i preventing or treating HPV induced tumours
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 1005 BP; 325 A; 182 C; 190 G; 308 T; 0 U; 0 Other;
                                                                                                              Sequence 1116 BP;
                                                                                                                                                                                                                                                                                   Composition comprising an E6, E7 induce immune response to HPV.
                                                                                                                                                                                                                                                                                                                            WPI; 1999-405485/34.
P-PSDB; AAY25377.
                                                                                                                                                                                                                                                                                                                                                                     Dalemans WLJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Fusion protein; E6 protein; E7 protein; E6/E7; immunomodulator; tumour; immunological fusion partner; CpG oligonucleotide; immune response; HPV antigen; prevention; treatment; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HPV fusion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       06-SEP-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                             24-DEC-1997;
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 604
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                          1 GAACAGCAATACAACCAAACCGTTGTGTG 28
                                                                     Similarity
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                                                                                                                                                                                                                                                       III; Page 49; 62pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAACAGCAATACAACAAACCGTTGTGTG 28
 GAACAGCAATACAACAAACCGTTGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          protein D1/3-E6E7-His/HPV16 DNA
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                                                      Conservative
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                                                                                                            368 A; 208 C; 235 G; 305 T; 0 U; 0 Other;
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100.0%; Pred. No. 0.0
Live 0; Mismatches
                                                                     100.0%; Score 28; 100.0%; Pred. No.
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                                                       Mismatches
                                                                                                                                                                                                                                                                                                  or E6/E7 fusion protein from
 631
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0.037;
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                                                                                  DB 2;
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RESULT 41
AAX29782
ID AAX29
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DT 17-OC
DT 22-JU
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XX Prot.
XX Prot.
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AED52637
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Matches 28
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human Papilloma Virus (HPV) fusion proteins - useful in treatment or prophylaxis of HPV induced lesions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human papillomavirus.
Haemophilus influenza
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22-JUN-1999
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Haemophilus influenzae; strain 772.
                              Pusion protein; vaccine; papilloma;
virucide; uterine cervix tumor; E7;
                                                                                Fusion protein
                                                                                                                29-DEC-2005
                                                                                                                                                 AED52637
                                                                                                                                                                                AED52637 standard; DNA; 1116 BP
                                                                                                                                                                                                                                                                                                                                                                                               Sequence 1116 BP; 368 A; 208 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Fig 6; 95pp; English.
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Lombardo-Bencheikh A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22-AUG-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAX29782;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 P-PSDB;
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DB; AAY02633.
                                                                                                                                                                                                                                                                604 GAACAGCAATACAACCAAACCGTTGTGTG 631
                                                                                                                                                                                                                                                                                   1 GAACAGCAATACAACAAACCGTTGTGTG 28
                                                                                                                                                                                                                                                                                                                                 28;
                                                                                                                                                                                                                                                                                                                                                 Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              E6; E7; fusion protein; protein D; vaccine; immunotherapy; esion; benign; malignant; virus; infection; ss.
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(first en
                                                                                                                (first entry)
                                                                                D1/3-E6-E7-His/HPV16, DNA.
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                                                                                                                                                                                                                                                                                                                                                 Score 28; DB 2;
Pred. No. 0.038;
                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                  235 G; 305 T; 0 U; 0 Other;
                              cytostatic; papillomavirus
E6; ds; gene; D protein.
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AAX778797
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Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to human Papilloma virus (HPV) fusion proteins, linked to an immunological fusion partner that provides T helper epitopes to the HPV antigen. Vaccine formulations comprising the fusion proteins are useful in the treatment or prophylaxis of HPV induced lesions (papillomas, warts and cervical cancer). HPV 16 (and HPV 18) E6 and E7 proteins (singly, as an E6-E7 fusion or mutated) were fused to either Haemophilus influenzae D protein (20-127), the C-terminus of Streptococcus pneumoniae Lyth protein (CLyth) or thioredoxin. The present sequence encodes an HPV-H. influenzae D protein, fusion protein of the
                                                                                                                                                                                                                                                              Pusion protein; E6 protein; E7 protein; E6/E7; immunomodulator; tumour; immunological fusion partner; CpG oligonucleotide; immune response; HPV antigen; prevention; treatment; ss.
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                         18-DEC-1998;
                                                                               08-JUL-1999.
                                                                                                                                                                                                                   Synthetic
                                                                                                                                                                                                                                                                                                                                                                             HPV fusion protein CLYTA-E6E7-His/HPV16 DNA.
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                                                                                                                                WO9933868-A2
                                                                                                                                                                                      Human papillomavirus.
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DB; AED52638.
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                                                                                           Human Papilloma Virus (HPV) fusion proteins - us treatment or prophylaxis of HPV induced lesions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human papillomavirus.
Streptococcus pneumon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chimeric; E6; E7; fusion protein; CLYTA; vaccine; immunotherapy; tumour; lesion; benign; malignant; virus; infection; 88.
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                                                                                                                                                                       WPI; 1999-190587/16.
P-PSDB; AAY02637.
                                                                                                                                                                                                                                             Bruck C, Cabezon Silva T,
Lombardo-Bencheikh A;
                                                                                                                                                                                                                                                                                                                                                                                                                            17-AUG-1998;
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22-JUN-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               preventing or treating HPV induced tumours
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                                                                                                                                                                                                                                                                                                                         (SMIK ) SMITHKLINE BEECHAM BIOLOGICALS.
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(first entry)
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Pred. No. C
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This sequence represents the coding region for a chimeric E6 or

87

Disclosure; Fig 14; 95pp; English.

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RESULT 45
AED52645
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Matches 28
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                       The invention relates to human Papilloma virus (HPV) fusion proteins, linked to an immunological fusion partner that provides T helper epitopes to the HPV antigen. Vaccine formulations comprising the fusion proteins are useful in the treatment or prophylaxis of HPV induced lesions (papillomas, warts and cervical cancer). HPV 16 (and HPV 18) B6 and E7 proteins (singly, as an E6-E7 fusion or mutated) were fused to either Haemophilus influenzae D protein (20-127), the C-terminus of Streptococcus pneumoniae LyCA protein (CLyCA) or thioredoxin. The present sequence encodes an HPV-LyCA, fusion protein of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Streptococcus pneumoniae. Human papillomavirus type Synthetic. Chimeric.
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                                                                                                                                                                       Example 12; Fig 14; 96pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pusion protein; vaccine; virucide; uterine cervix
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Sequence 1173 BP;
                                                                                                                                                                                                                                                                                                                                  22-AUG-1997;
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DB; AED52646.
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                                                                                                                                                                                                                                                                                                       SMITHKLINE BEECHAM BIOLOGICALS
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380 A;
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229
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tumor; E7;
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C; 276 G; 288 T; 0 U; 0 Other,
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Pred. No.
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RESULT 46
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Pred. No. 0.038;
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es 28; Conservative 0; 1 GAACAGCAATACAACAACCG                    767 GAACAGCAATACAACAACCAACCAACCAACCAACCAACCA	atch 100.0%; Score 28; DB 5; Length 7840; cal Similarity 100.0%; Pred. No. 0.047;	FI misc_feature 7800 FT /*tag= ax FT /note= "this base is given as N because it was illegible	in the figure"  7750  /*tag= av /note= "fhis base is given as N because it was i	in the fine the 7700 /*tag= /note=	at "this base is given as N because it was figure" at at this base is given as N because it was	/*tag= /note= in the misc_feature 7600	misc feature	misc feature	misc	feature	misc_feature	FT misc feature 7250  FT /*tag= al FT /note= "this base is given as N because it was illegible FT in the figure"  FT misc feature 7300	in the figure" 7200 /*tag= ak /note= "this base is given as N because it was in the figure"	misc_feature 7	FT /*tag= ah FT /ntc= "this base is given as N because it was illegible FT in the figure" FT misc_feature 7100 FT /**Fag= ai	misc_feature 7050

Human papillomavirus type 16.

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RESULT 48
AAT94724
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AAT09847
ID AAT09
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                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 28; Conserv
                                                                                                                                                                                                                                                                                                                                                                                 be used to cleave HPV or to detect HPV in human tissue. The ribozymes cleave HPV to lower the production of the E6 and E7 proteins which play a key role in keratinocyte transformation. They can be used for the treatment of HPV infections which are associated with genital warts and genital neoplasms. In particular they can be used for the treatment of cervical cancer optionally with other agents such as cisplatin. Ribozymes are described in AAT40306-T40315. (Updated on 27-AUG-2003 to correct OS field.)
               Complete genome; circular; human papillomavirus type 16; HPV16 cervical dysplasia; cervical cancer; cervical smear; ds.
                                                                                                                                                                                                                                                                                                                                                       Sequence 7902 BP; 2601 A; 1376 C; 1507 G; 2418 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 25-29; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic ribozyme(s) for human papilloma virus (HPV) - useful in treatment of cervical cancer and in detection of HPV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1996-010937/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hampel A,
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02-JAN-1997
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                                                                                        25-MAR-2003
16-FEB-1998
                                                                                                                                   AAT94724;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human papilloma virus; HPV; ribozyme; cleavage; E6; E7; keratinocyte; infection; genital warts; neoplasia; cervical cancer; warts; ds.
                                                         Human papillomavirus type 16 E6 variant nucleotide sequence
                                                                                                                                                              AAT94724 standard; DNA; 7904 BP
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                                                                                                                                                                                                                                      368 GAACAGCAATACAAACCGTTGTGTG 395
                                                                                                                                                                                                                                                                GAACAGCAATACAACCAAACCGTTGTGTG 28
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100.0%; Pred. No. 0.047;
tive 0; Mismatches 0
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Methods have been developed for distinguishing papilloma virus (HPV) that is associated with a
                        Claim 1; Col 15-24; 33pp; English.
                                      Evaluating risk of cervical dysplasia or cervical cancer - by detecting variant form of human papilloma virus 16.
                                                                         WPI; 1997-525714/48.
                                                                                                                         28-SEP-1993;
                                                                                                                                          30-SEP-1994;
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                                                                                         Wheeler CM,
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                                                                                         Parmenter CA;
                                                                                                          NEW MEXICO STATE
                                                                                                                         9308-00127906.
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/product= "
/note= "E6
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/note= "L1 ORF from 5526 to 7154; putative"
7260. .7265
                                                                                                                                                                                                                                                          /product= "L2 minor_capsid_protein"
/note= "L2 ORF from 4133 to 5656; putative"
                                                                                                                                                                                                                                                                                                                  /product= "E5"
/note= "E5 ORF
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*tag= m
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                                                                                                                                                                                                                                                                                           note= "Putative"
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note= "E2_ORF from 2725 to 3852;
332. .3619
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note= "E4 ORF
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note= "El interrupted ORF from 859
755. .3852
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   product= "E7 transforming_protein"
note= "E7 ORF 544 to 858; putative"
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ORF from 65 to 559; puta
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CC (1) preparing a cervical sample to expose any HPV-16 E6 gene in the

CC sample and determining if the base at position 350 of the E6 gene (see

CC AAT94723 and AAT94724 for comparison) is T or G, where the presence of G

CC at position 350 is associated with an increased risk of developing

CC cervical dysplasia or cervical cancer; and (2) preparing a cervical

CC sample to expose any HFV-16 E6 protein in the sample and determining if

CC the amino acid at position 83 of the protein (see position 90 in AAW35741

CC and AAW35742 for comparison) is Val or Leu, where the presence of Val at

CC correlates well at is associated with an increased risk of developing

CC cervical dysplasia or cervical cancer. The present sequence represents

CC the variant nuclectide sequence for HPV-16 E6. The 350G variant

CC correlates well with Pap scores; 350T:350G ratios among 45 HFV16 samples

CC were 10:4 for negative Pap scores; 4:2 for CIN I, 1:6 for CIN II; 2:9 for

CC CIN III; 0:3 for cancer. (Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local S
Matches 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Complete genome; circular; human papillomavirus type 16; HPV16 E6; cervical dysplasia; cervical cancer; cervical smear; ds.
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16-FEB-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                papillomavirus type 16.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28;
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(first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /*tag=
              /product= "E4"
/note= "E4 ORF from 3332 to 3619; putative"
                                                                                                                                   /*tag= g
product= "E2_regulatory_protein"
note= "E2_ORF from 2725 to 3852; putative"
                                                                                                                                                                                                                                                  product= "E1_replication_protein"
note= "E1_interrupted ORF from 859 to 2813; putative"
                                                                                                                                                                                                                                                                                                                                                                   product= "E7 transforming protein" note= "E7 ORF 544 to 858; putative"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     note= "Mutated
n the variant"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  product=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            *tag= c
                                                                                                                                                                                                                                                                                                                                           65. .2813
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          note= "E6
                                                                                                                                                                                                                       755. .3852
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100.0%; P
ative 0;
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                                                                                                           .3619
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ORF from 65 to 559; puta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 28; DE
Pred. No. 0.0
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   from the normal T (as in this case)
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0.047;
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RESULT 50 AAX33881

AAX33881 standard; DNA; 7904 BP.

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AAX33881;

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Methods have been developed for distinguishing a subset of human comparison virus (HPV) that is associated with an increased risk of developing cervical dysplasia or cervical cancer. The methods involve: (1) preparing a cervical sample to expose any HPV-16 E6 gene in the comparison and AAF94724 for comparison) is T or G, where the presence of G cat position 350 is associated with an increased risk of developing cervical dysplasia or cervical cancer; and (2) preparing a cervical for comparison) is T or G, where the presence of G cat position 350 is associated with an increased risk of developing cervical dysplasia or cervical cancer; and (2) preparing a cervical for sample to expose any HPV-16 E6 protein in the sample and determining if the amino acid at position 83 of the protein (see position 90 in AAW35741 cand AAW35742 for comparison) is Val or Leu, where the presence of Val at position 83 that is associated with an increased risk of developing cervical dysplasia or cervical cancer. The present sequence represents the reference mucleotide sequence for HPV-16 E6. The 350G variant the reference mucleotide sequence for HPV-16 E6. The 350G variant correlates well with Pap scores; 350T:350G ratios among 45 HPV16 samples were 10:4 for negative Pap scores; 4:2 for CIN I, 1:6 for CIN II; 2:9 for CIN III; 0:3 for cancer. (Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                    Matches
                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; Col 9-16; 33pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Evaluating risk of cervical dysplasia or cervical cancer - variant form of human papilloma virus 16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1997-525714/48.
P-PSDB; AAW35741.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28-SEP-1993;
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368 GAACAGCAATACAACAAACCGTTGTGTG 395
                                                                                                                 28;
                                                        1 GAACAGCAATACAACAAACCGTTGTGTG 28
                                                                                                                                                                                                                                   7904 BP; 2601 A; 1377 C; 1509 G; 2417 T; 0 U; 0 Other;
                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Parmenter CA;
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/note= "L1 ORF from 5526 to 7154; putative"
7260. .7265
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/note= "E5 ORF from 3863 to 4099; putative"
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/note= "L2 ORF from 4133 to 5656; putative"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      559.
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                                                                                                                                              100.0%; Score 28; DB 2; 100.0%; Pred. No. 0.047;
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Matches 28
                                                                                                                                                                                                                  This sequence represents a sequence from the HPV-16 genome. This invention relates to antisense oligonuclectide analogs (ONs) that have a sequence complementary to a sequence of nucleotides 415-445 of human papilloma virus-16 (HPV-16). The antisense ONs can be used to inhibit expression of HPV gene E6/E7 in living cells, preferably human keratinocytes or human cervical cells. They bind to E6/E7 mRNA in the cell, prevent mRNA translation and promote mENA degradation by intracellular RNase H. They can be used for preventing transformation of living cells by HPV. The antisense ONs are used particularly for inhibiting the growth of cervical tumours. (Updated on 17-OCT-2003 to standardise OS field)
                                                                                                                                                                                       Sequence 7904 BP; 2601 A; 1377 C; 1509 G; 2417 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          03-SEP-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HPV-16; inhibitor; antisense oligonucleotide; keratinocyte; cervical cell; cervical tumour;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HPV-16 genomic sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-OCT-2003
25-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 28-32; 40pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense oligonucleotide analogs for inhibiting growth of cervical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1999-243727/20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Dipaolo J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             05-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-MAR-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (USSH ) US DEPT HEALTH & HUMAN SERVICES.
                                                                368 GAACAGCAATACAACAAACCGTTGTGTG
                                                                               1 GAACAGCAATACAACAAACCGTTGTGTG 28
                                                                                                                            28;
                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alvarez-Salas L;
                                                                                                                          100.0%; Score 28; DB 2; Length 7904; ilarity 100.0%; Pred. No. 0.047; Conservative 0; Mismatches 0; Indels
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PCR primer;
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beta-actin; ss.
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Minimum
Maximum
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Perfect score:
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Fax: 972 8 9468 265
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Rukaryota; Viridplantae; Streptophyta; Embryophyta; Tracheophyta;
Rosarmatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons;
rosids; eurosids I; Rosales; Rosaceae; Rosoideae; Rosa.

1 (bases I to 244)
Rosarmator Chilit M. Mondo N. Diesto D. Deso, Volin M.
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                                                                                                                               Plant Cell 14 (10),
                                                                                                                                      Rose Scent: Genomics Approach to Discovering Novel Floral Fragrance-Related Genes
                                                                                                                                                               Guterman,I., Shalit,M., Menda,N., Piestun,D., Dafny-Yelin,M.,
Shalev,G., Bar,E., Davydov,O., Ovadis,M., Emanuel,M., Wang,J.
Adam,Z., Pichersky,E., Lewinsohn,E., Zamir,D., Vainstein,A. a
                                                                                                                      Contact: Naama Menda
                                                                                                                                                                                                                                                      BQ106475.1 GI:20156137
                                                il: shaham@agri.huji.ac.il
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AII104033 EST213322
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1 (bases 1 to 212)
Whitelaw, C.A., Quackenbush, J., Van Aken, S., Utterback, T.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BZ680296 212 bp DNA linear GSS 05-FEB-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Email: whitelaw@tigr.org
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Fax: 301-838-0208
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/mol_type="genomic DNA"
/strain="B73"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                       /db_xref="taxon:4577"
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92.0%;
                                                                       floridae DNA, clone:
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100.0%; Pred. No.
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Pred. No. 99;
                                                                                                                                                                                                                                                       Mismatches
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Yuan,Y., San Miguel,P., Ma,J. and
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CH302-100_A12_TJ, genomic survey
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AL235260.1 GI:7894395
GSS; genome survey sequence.
Tetraodon nigroviridis
Tetraodon nigroviridis
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Tetraodontiformes;
Tetradontoidea; Tetraodontidae; Tetraodon.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CNS03AIR
953 bp DNA linear GSS 01-SEP-2000
Tetraodon nigroviridis genome survey sequence T7 end of clone
010C15 of library G from Tetraodon nigroviridis, genomic survey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Submitted (12-AUG-2005) Asao Fujiyama, The Institute of Physical and Chemical Research (RIKEN), Genomic Sciences Center (GSC); 1-7-22 Suehhiro-chou, Tsurumi-ku, Yokohama, Kanagawa, 230-0045, Japan (B-mail:afujiyam@ggc.riken.jp, URL:http://stt.gsc.riken.jp/, Tel:81-45-503-9111, Fax:81-45-503-9170)
Roest Crollius, H., Jaillon, O., Dasilva, C., Ozouf-Costaz, C., Fizames, C., Fischer, C., Bouneau, L., Billault, A., Quetier, F., Saurin, W., Bernot, A. and Welssenbach, J. Characterization and repeat analysis of the compact genome of the freshwater pufferfish Tetracdon nigroviridis Genome Res. 10 (7), 939-949 (2000)
                                                                                                                                                                 Roest Crollius, H., Jaillon, O., Dasilva, C., Bouneau, L., Fisher, C., Bernot, A., Fizames, C., Wincker, P., Brottler, P., Quetier, F., Saurin, W. and Weissenberneund.

Estimate of human gene number provided by genome-wide analysis using Tetracdon nigroviridis DNA sequence

Nat. Genet. 25 (2), 235-238 (2000)
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Branchiostoma floridae
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2 (bases 1 to 677)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Branchiostoma.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tissue_type="sperm"
/clone_lib="CH0RI0302 Amphioxus genomic BAC library"
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/db_xref="taxon:7739"
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88.5%;
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Zea mays
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Web: www.genoscope.cns.fr)
This sequence is a single read and was generated as scale clone-end sequencing project of the Tetraodon genome. For more information, please take a look at http://www.genoscope.cns.fr/Tetraodon.

Location/Qualifiers
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genomic clone hz21g05
BZ321278
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Submitted (12-APR-2000) Genoscope - Centre National de
BP 191 91006 EVRY cedex - FRANCE (B-mail : segref@genos
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                                                                                                                                                                                                                                                                                                                                                           Contact: W. Richard McCombie
Lita Annenberg Hazen Genome Sequencing Center
Cold Spring Harbor Laboratory
PO Box 100, Cold Spring Harbor, NY 11724, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rabinowicz, P.D., O'Shaughnessy, A.L., Balija, V., Dedhia, N. Katzenburger, F., King, L., Miller, B., Muller, S., Nasciment Zutavern, T., McCombie, W.R. and Martienssen, R.A. Genomic shotgun sequences from Zea mays (methyl-filtered)
                                                                                                                                                                                                 Class: shotgun
High quality sequence stop: 5
Location/Qualifiers
                                                                                                                                                                                                                                                              Email: mccombie@cshl.org
plate: hz21 row: g column:
Seq primer: -21M13UnivRev
                                                                                                                                                                                                                                                                                                                    Tel: 516 367 8884
Fax: 516 367 8874
                                                                                                                                                                                                                                                                                                                                                                                                                                      Unpublished (2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
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GSS.
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/clone="hz21g05"
/lab host="MGS-TamaysF (JM107 adapted methyl filtered)"
/clone_lib="MGS-TamaysF (JM107 adapted methyl filtered)"
/note="Organ: immature ears; Site_1: Xba I; Site_2: Xba
The vector was digested with XbaI and one nucleotide war
added by fill in in the recessive 3' end. The genomic I
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/note="Genoscope sequence
end : T7"
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/mol_type="genomic DNA"
/db_xref="teaxon:99883"
/clone="010C15"
                                                                                                                                  /mol_type="genomic DNA"
/cultivar="B73"
                                                                                                                db_xref="taxon:4577"
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(JM107 adapted methyl filtered)
5', genomic survey sequence.
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the Tetraodon nigroviridis
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KEYWORDS
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Dunn, D., Aoyagi, A., Barber, M., Beacorn, T., Duval, B., Hamil, C., Islam, H., Longacre, S., Mahmoud, M., Meenen, E., Pedersen, T., Reilly, M., Rose, M., Rose, R., Stokes, R., Tingey, A., von Niederhausern, A. and Wright, D., Weiss, R.
Mouse, whole genome scaffolding with paired end reads from 10kb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AZ412297 532 bp DNA linear GSS 03-OCT-20
1M0185M08R Mouse 10kb plasmid UUGCIM library Mus musculus genomic
clone UUGC1M0185M08 R, genomic survey sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 GAACAGCAATACAACAAACCGTTGTGT 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Error: 0.00
Plate: 0185 row: M column: 08
Seq primer: CACACAGGAAACAGCTATGACC
Class: plasmid ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tel: 801 585 5606
Fax: 801 585 7177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         University of Utah Genome University of Utah
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unpublished (2000)
Contact: Robert B. Weiss
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi; Muroidea; Muridae; Murinae; Mus.
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AZ412297.1 GI:10536310
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USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  quality sequence stop: 532
/lab host="E. Coli strain XL10-Gold, T1-resistant, F-"
/clone lib="Mouse 10kb plasmid UUGCIM library"
/note="Vector: PMD42nv, Purified genomic DNA from M.
musculus C57BL/6J (male) was obtained from the Jackson
Laboratory Mouse DNA Resource
(http://www.jax.org/resources/documents/dnares/). The DNA
was hydrodynamically sheared by repeated passage through a
0.005 inch orifice at constant velocity. The sheared DNA
was blunt end-repaired with T4 DNA polymerase and T4
polynucleotide kinase. Adaptor oligonucleotides were
ligated to the blunt ends in high molar excess. The
adaptored DNA was purified and size-selected for a 9.5 to
10.5 kb range using preparative agarose gel
electrophoresis. Vector DNA was prepared from a derivative
of pWD42 (gi|4732114|gb|AF129072.1), a copy-number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 was nebulized, end repaired, adaptor ligated and size fractionated using sephadex. The resulting fragments we between 0.8 and 3 kb and were cloned into the vector (.x/y reads in M13mpl9, .b/g reads in pUC19). The same ligation was transformed in either JM107 or DH5a.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="genomic DNA"
/strain="C57BL/6J"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                              sex="Male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                        clone="UUGC1M0185M08"
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Best Local Similarity
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381
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hz21g05.b1 WGS-ZmaysF (JM107 adapted methyl filtered)
genomic clone hz21g05 5', genomic survey sequence.
BZ314774
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                                                                    1 GAACAGCAATACAACAAACCGTTGTGT 27
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Plate: hz21 row: g column: 05
Seq primer: -21M13UnivFwd
Class: shotgun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Lita Annenberg Hazen Genome Sequencing Center
Cold Spring Harbor Laboratory
PO Box 100, Cold Spring Harbor, NY 11724, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unpublished (2002)
Contact: W. Richard McCombie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rabinowicz,P.D., O'Shaughnessy,A.L., Balija,V., Dedhia,N. Katzenburger,F., King,L., Miller,B., Muller,S., Nasciment Zutavern,T., McCombie,W.R. and Martienssen,R.A. Genomic shotgun sequences from Zea mays (methyl-filtered)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD clade; Panicoideae; Andropogoneae; Zea.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Zea mays
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           High quality
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tel: 516 367 8884 Fax: 516 367 8874
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GSS.
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                                                                                                                                                                          Similarity
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                                                                                                                                     Conservative
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                                                                                                                                                                                                                                                                                                        /lab_host="JM107 or DH5a"
/clone lib="WGS-ZmaysF (JM107 adapted methyl filtered)"
/clone lib="WGS-ZmaysF (JM107 adapted methyl filtered)"
/note="Torgan: immature ears; Site_1: Xba I, Site_2: Xba I,
/note="Torgan: immature ears; Site_1: Xba I, Site_2: Xba I,
/note="Torgan: Immature ears; Site_1: Xba I,
/note="Torgan: Immature ears; Site_1: Xba I,
/note="Torgan: Immature ears; Site_1: Xba I,
/note="Torgan: Infattered ears; Site_1: Xba I,
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/note="Torgan: Infattered ears; Site_1: Xba I,
/note="Torgan: Infattered ears; Site_1: Xba I,
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/note="Torgan: Infattered ears; Site_1: Xba I,
/note="Torgan: Infattered ears; Site_1: Xba I,
/note="Torgan: Infattered ears; Site_1: Xba I,
/note="Torgan: Infattered ears; Site_1: Xba I,
/note="Torgan: Infattered ears; Site_1: Xba I,
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/note="Torgan: Infattered ears; Site_1: Xba I,
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/note="Torgan: Infattered ears; Site_1: Xba I,
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/note="Torgan: Infattered ears; Site_1: Xba I,
/note="Torgan: Infattered ears; Site_1: Xba I,
/note="Torgan: Infattered ears; Site_1: Xba I,
/note="Torgan: Infattered ears; Site_1: Xba I,
/note="Torgan: Infattered ears; Site_1: Xba I,
/note="Torgan: Infattered ears; Site_1: Xba I,
/note="Torgan: Infattered ears; Site_1: Xba I,
/note="T
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /db_xref="taxon:4577"
/clone="hz21g05"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="genomic DNA"
/cultivar="B73"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  organism="Zea mays"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ity sequence stop:
Location/Qualifiers
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85.2%;
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Pred. No. 3
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Pred. No. 3.
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RESULT 8
CC274364/c
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AQ075030/c
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Washington University School of Medicine
Email: submissions@watson.wustl.edu
Insert Length: 182000 Std Error: 0.00
Seq primer: Sp6 ATTTAGGTGACACTATAG
Class: BAC ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae; Gallus.

1 (bases 1 to 1058)

Kremitzki,C., Higginbotham,J., Wylie,K., Carter,J., McPherson,J., Warren,W., Graves,T., Mardis,B. and Wilson,R.
Gallus Gallus BAC End Reads
Unpublished (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CC274364 1058 bp DNA linear GSS 13-MAY
CH261-20G8_Sp6.1 CH261 Gallus gallus genomic clone CH261-20G8
genomic survey sequence.
Use of a random human BAC End Sequence Database for Sequence-Ready Map Building Unpublished (1998)
                                                                                                                                                                                                                                                   genomic survey sequence.
AQ075030
AQ075030.1 GI:3435601
                                                                                                                                                                                                                                                                                                              AQ075030 207 bp
CIT-HSP-2364011.TR CIT-HSP Homo
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                                                                         1 (bases 1 to 207)
Adams, M.D., Rounsley, S.D., Zhao, S., Bass, S., Linher, K., Golde
Berry, K., Granger, D., Suh, E., Wible, C., Shizuya, H., Simon, M.
                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                Homo sapiens (human)
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Location/Qualifiers
                                                                                                                                                                                              sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Gallus gallus"
/mol_type="genomic DNA"
/strain="Red Jungle Fowl"
/db xref="taxon:9031"
/clone="CH261 20G8"
/sex="female"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note="Vector: pTARBAC2.1; Site 1: EcoRI; Site 2: EcoRI; CH261 Female Chicken library - For library and clone ordering information: http://www.chori.org/bacpac"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /cell_line="UCD001, inbred
/clone_lib="CH261"
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Pred. No. 3.8e
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mon,M. and
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RESULT 10
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The Institute for Genomic Research
9712 Medical Center Dr., Rockville,
Tel: 301 838 0200
Fax: 301 838 0208
                                                                                                                                                                                                                       Unpublished (1998)
Other GSSs: CITBI-E1-2506L6.TR
Contact: Mark Adams
Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Dr., Rockville,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GAACAGCAATACAACAAACCGTTGTGTG 28
                                                                                     Clones are available from Research Genetics (info@resgen.com). BAC end search page:
http://www.tigr.org/tdb/humgen/bac_end_search/bac_end_search.html.
Seq primer: M13-21
Class: BAC ends.
                                                                                                                                                                      Tel: 301 838 0200
Fax: 301 838 0208
Email: mdadams@tigr.org
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CITBI-E1-2506L6.TF CITBI-E1 I
                                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to 593)
Adams,M.D., Rounsley,S.D., Zhao,S., Bass,S.,
Berry,K., Granger,D., Suh,E., Wible,C., Shize
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
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GSS.
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Seq_primer: M13 Reverse
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Email: mdadams@tigr.org
Clones are available from Research
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Other GSSs: CIT-HSP-2364011.TF
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/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /cell_type="Sperm"
/clone_lib="CIT-HSP"
/note="Vector: pBeloBAC11; Site_1: HindIII; Site_2:
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                                                        1. .593
                                                                    Jocation/Qualifiers
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6.1e+02;
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349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Venter, J.C.
Use of BAC End Sequences from Library RPCI-11 for Sequence-Ready
Map Building
Unpublished (1997)
Other_GSSs: RPCI-11-281B13.TV
Contact: Shaying Zhao, William Nierman, Mark Adams
Department of Eukaryotic Genomice
The Institute for Genomic Research
The Institute for Genomic Research
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: hbe@tigr.org

Clones are derived from the human BAC library RPCI-11. For BAC

library availability, please contact Pieter de Jong

(pieter@dejong.med.buffalo.edu). Clones may be purchased from

BACPAC Resources (http://bacpac.med.buffalo.edu/ordering) or from

BACPAC Resources (http://bacpac.med.buffalo.edu/ordering) or from

Research Genet cs (info@resgen.com). BAC end search page:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GAACAGCAATACAAACCAAACCGTTGTGTG 28
                                                                                                                                                                                                                                                                                                                                                                                                 http://www.tigr.org/tdb/humgen/bac_end_search/bac_
Seq_primer: SP6
Class: BAC ends.
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Venter,J.C.
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Homo sapiens
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                                                                                                                                                                /clone_lib="RPCI-11"
/note="Vector: pBACe3.6; Site_1:
RPCI11 Human Male BAC Library"
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/clone lib="CITB1-E1"
/clone lib="CITB1-E1"
/note="Vector: pBeloBAC11; Site_1: EcoRI; Site_2: EcoRI;
CalTech Human BAC Library D"
                                                                                                                                                                                                                                                                                /mol_type="genomic DNA"
/db_xref="GDB:7607628"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                       organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                  'sex="Male"
                                                                                                                                                                                                                                                                'clone="RPCI-11-281E13"
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                                                                                       71.4%;
82.1%;
                                                                                                                                                                                                    _type="Lymphocytes"
e_lib="RPCI-11"
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Pred. No. 6.7e.
0; Mismatches
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sapiens genomic clone
                                                                                       6.7e+02;
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6.7e+02;
                                                                                                           DB 11;
                                                                                                           Length 675;
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                                                                                                                                                                                  Site_2:
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RESULT 13
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DR982710/c
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Best Local Similarity
Matches 23; Conserv
                                     ORGANISM
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                                   Sus scrofa
                                                                         Sus scrofa genomic clone CT237387 CT237387.1 GI:79744191 GSS.
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Location/Qualifiers
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DOE Joint Genome Institite
2800 Mitchell Drive, Walnut Creek,
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JGI AOKF633.fwd AOKF Acropora palmata
cDNA clone AOKF633 5', mRNA sequence.
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Suina; Suida
                                                      Sus scrofa (pig)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        indicates a forward sequencing read of the insert. necessarily reflect the orientation of the insert. Plate: AOKF 0005 row: a column: 16
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Naming Conventions: EST name is generated by the concatenation of
the JGI Clone Id and the direction of sequencing. The suffix '.fwd'
indicates a forward sequencing read of the insert. It does not
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unpublished (2005)
Other_ESTs: JGI_AOKF633.rev
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: jaschwarz@lbl.gov
cDNA Library Preparation: DOE Joint Genome Institute:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Coral-Symbiodinium EST Project
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Astrocoeniina; Acroporidae;
1 (bases 1 to 762)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tel: 925-296-5823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: Schwarz,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          and Medina, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Cnidaria; Anthozoa;
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                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                              /dev_stage="Freshly spawned eggs"
/lab_host="RlectroMAX DH10B"
/clome_lib="AOKF Acropora palmata spawned eggs"
/note="Vector: pDNR-LIB; Site_1: SfiI; Site_2: SfiI; The
library was prepared from total RNA using the Creator
SMART cDNA Library Construction Kit with the LD-PCR method
to amplify the cDNA. Amplified cDNA was digested with
SfiI, size selected for >400bp, and ligated into the
pDNR-LIB vector."
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/db_xref="taxon:6131"
/clone="AOKF633"
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82.1%;
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palmata spawned eggs Acropora palmata
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6.8e+02;
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                                                                                                                                                            linear
                                                                                                                                       survey sequence.
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Suina; Suidae;
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Best Local :
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This sequence was generated from the T7 end of BAC 181F11. 181F11 is part of the CHORI-242 BAC Library created by P. de Jong. Further details: http://www.sanger.ac.uk/Projects/S_scrofa/.
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Direct Submission
Submitted (01-NOV-2005) The Sanger Institute, V
Submitted (01-NOV-2005) The Sanger Institute, V
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov Tissue Procurement: ATCC
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602664002F1 NIH_MGC_59
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa;
Mammalia; Eutheria;
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NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
Unpublished (1999)
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                                                                                                                                                                                                                                                                                                                                                         http://image.llnl.gov
Plate: LLCM1663 row: d column: 02
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Similarity 82.1%;
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Location/Qualifiers
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/clone="IMAGE:4809169"
/tissue_type="mucoepidermoid carcinoma"
/lab_host="DH10B (Tl phage-resistant)"
/clone_lib="NIH MGC_59"
/clone_lib="NIH MGC_59"
/note="Organ: lung; Vector: pDNR-LIB (Clontech); Site_1:
SfiI (ggccgcctcggcc); Site_2: SfiI (ggccatcttggcc);
Double-stranded cDNA was pre-resist from cell line RNA. 5'
and 3' adaptors were used in cloning as follows: 5'
adaptor sequence: 5'-CACGGCCATTATGGCC-3' and 3' adaptor
sequence: 5'-ATTCTAGAGGCCGAGGCCGCCACTGGTG.3') BN-3'
Expense: 5'-ATTCTAGAGGCCGAGGCCGCCGACATGGTG.3')
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/db xref="taxon:9823"
/db xref="taxon:9823"
/clone="CH242-181F11"
/clone="CH242-181F11"
/tissue_type="White blood cells"
/note="Tector_pTARBAC1.3_BamHI
/note="Tector_pTARBAC1.3_BamHI
                                                                                                                                                                                                                            /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
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cDNA clone IMAGE:4809169 5',
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RESULT 16
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Best Local &
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BE306182 1531 bp mRNA linear EST 26-OCT-2000 001101310F1 NCI_CGAP_Lu29 Mus musculus cDNA clone IMAGE:3493587 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Gilbert Smith, ph.D.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mammalia; Eutheria; Euarchontoglires; Gli;
Sciurognathi; Muroidea; Muridae; Murinae;
1 (bases 1 to 1531)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         High quality sequence stop: 101.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mus musculus (house mouse)
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EST.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Plate: LLAM8541 row: d column:
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                                                                                          GAGCAGCAGGACAGCCAAGCCGTTGTGTG 130
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                                                                                                                                                                                                                                                /cione lib="NCI_CGAP_Lu29"
/note="Organ: lung; Vector: pcMV-SPORT6; Site_1: Sall;
Site_2: NotI; Cloned unidirectionally. Primer: Oligo dT.
Library constructed by Life Technologies. Investigator
providing samples: Gilbert Smith, NIH"
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                                                                                                                                                                                                                                                                                                                                                           tissue type="spontaneous tumor, metastatic to tem cell origin."
                                                                                                                                                                                                                                                                                                                                                                                tissue_
                                                                                                                                                                                                                                                                                                                                                                                                   clone="IMAGE:3493587"
                                                                                                                                                                                                                                                                                                                                                                                                                  db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                       strain="Czech II"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         organism="Mus musculus"
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82.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    type="mRNA
                                                                                                                                                            Score 20; DB 7; Le
Pred. No. 7.2e+02;
0; Mismatches 5;
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Pred. No. 6.
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BG512658

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mRNA

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EST 28-MAR-2001

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SOURCE
ORGANISM
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AUTHORS
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KEYWORDS
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KEYWORDS
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                                                                                                                                                                                                                                     DEFINITION
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
          AUTHORS
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                                                                                                                                                                                                                                                                                                                                                           250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WashU Xenopus EST project, 1999
Unpublished (1999)
Other ESTs: dad31b04.y1
Contact: Sandy Clifton, Ph.D.
WashIngton University School of Medicine
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis,
                                                                                                                                                                                                           BP707553 Osada Taira anterior neuroectoderm (ANE) pCS105 cDNA
library Xenopus laevis cDNA clone XL491g22ex 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  dad31b04.x1 Wellcome CRC pCS107 tropicalis St10-12 Xenopus tropicalis cDNA clone IMAGE:4440919 3' similar to SW:SET_HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Clifton,S., Johnson,S.L., Blumberg,B., Song,J., Hillier,L., Pape,D., Martin,J., Wylie,T., Underwood,K., Theising,B., Bo Person,B., Gibbons,M., Harvey,N., Ritter,E., Jackson,Y., Mc Waterston,R. and Wilson,R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae; Xenopodinae; Xenopus; Silurana.

1 (Dases 1 to 502)
1 (bases 1 to 631)
Osada, S., Kitayama, A., Ueno, N. and Taira, M.
                           Xenopodinae; Xenopus; Xenopus.
1 (bases 1 to 631)
                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                            Xenopus laevis (African clawed Xenopus laevis
                                                                                                                                                                         BP707553.1 GI:46055952
                                                                                                                                                                                            library Xenopus laevis
BP707553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Clone distribution: Xenopus clones from this library are available through the I.M.A.G.E. Consortium/LINI at: info@image.lln1.gov Possible reversed clone: similarity on wrong strand Seq primer: -40UP from Gibco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Email: est@watson.wustl.edu
Library constructed by A. Zorn and J. Mason (Wellcome/CRC
Institute). DNA Sequencing by: Washington University Genor
Sequencing Center
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tel: 314 286 1800
Fax: 314 286 1810
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BG512658
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       quality sequence stop: 486.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /clone="IMAGE:4440919"
/tissue type="whole embryo, stages 10-12"
/lab_host="PH108 (phage-resistant)"
/clone_lib="Wellcome CRC pCS107 tropicalis St10-12"
/note="Vector: pCS107, Site_1: NotI, Site_2: EcoRI; cDNAs
were oligo-dT primed and directionally cloned. Average
insert size_1.5 kb, range_0.5-4 kb. Library constructed by
A. Zorn and J. Mason (Wellcome/CRC Institute). "
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           70.7%;
91.3%;
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Pred. No. 8.1e+02
                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                 frog)
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McCann, R.,
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AUTHORS
TITLE
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COMMENT
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      Query Match
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TITLE
                                                                                                                                                                                                                                            Department of Biological Sciences
Graduate School of Science, University of Tokyo; CREST,
Science and Technology Corporation, Japan
7-3-1 Hongo, Bunkyo-ku, Tokyo 113-0033, Japan
Tel: 81-03-5941-4434
                                                                                                                                                                                                                                                                                                                                                                             Osada, S., Kitayama, A., Ueno, N. and Taira, M. Expression analysis of genes which are expreneuroectoderm of Xenopus embryos Unpublished (2004)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3 ACAGCAATACAACCAAACCGTTGT 25
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Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Xenopus laevis
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unpublished (2004)
Contact: Masanori Taira
                                                                                                                                                                 Amphibia, Batrachia; Anura; Mesobatrachia;
Xenopodinae; Xenopus, Xenopus.
1 (bases 1 to 637)
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7-3-1 Hongo, Bunkyo-ku, Tokyo 113-0033,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Department of Biological Sciences
Graduate School of Science, University of Tokyo; CREST, Japan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Expression analysis of genes which are expressed in
                                                                                                                                                                                                                                   Fax: 81-03-5841-4434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Xenopus laevis (African clawed frog)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /clone="XL491g22ex"
/tissue_type="anterior neuroectoderm"
/dev_stage="late gastrula (stage 12.5)"
/clone_lib="Osada Taira anterior neuroectoderm
pCS105_cDNA library"
/clōne="XL490g22ex"
/cissue_type="anterior neuroectoderm"
/dev_stage="late_gastrula (stage 12.5)"
/clone_lib="Osada Taira anterior neuroectoderm (ANE)
                                                                                organism="Xenopus laevis"
/mol_type="mRNA"
/db_xref="taxon:8355"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="mRNA"
/db_xref="taxon:8355"
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Pred. No. 8.
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Score 19.8;

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Length 637

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CO382721/c
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NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

L Unpublished (1999)

L Ontact: Daniela S. Gerhard, Ph.D.

Office of Cancer Genomics

National Cancer Institute / NIH

Bldg. 31 Rm10A07 Bethesda, MD 20892

Email: cgapbs-remail.nih.gov

Tissue Procurement: Bruce Blumberg

CDNA Library Preparation: B. Blumberg

CDNA Library Preparation: B. Blumberg

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bloscience Corporation

Clone distribution: MGC clone distribution information can be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              215
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Xenopus laevis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CO382721 811 bp mRNA linear EST 30-JUI AGENCOURT 26189827 Blumberg Cho dorsal blastopore lip Xenopus laevis cDNA clone IMAGE:7295911 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CO382721
CO382721.1 GI:49490823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Plate: LLAM15318 row: n column: 05
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1 (bases 1 to 811)
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70.7%; ilarity 91.3%; Conservative
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Location/Qualifiers
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                                                                                                                                                             /note=Torgan: embryo; Vector: pBluescript SK-; Site 1:
ECORI, Site 2: KhoI; Library was prepared from 50 ug of
total RNA by oligo-dT priming and AMV reverse
transcriptse. After addition of EcoRI linkers and
ECORI-XhoI digestion, the CDNA was size selected by
chromatography on Sepharose CL-48 columns and fractions
containing cDNAs larger than 500 bp were ligated into
ECORI-XhoI-digested lambda ZAPII (UniZAP-XR) and packaged
in vitro. Average insert size is 1.4 kb. The original
library contained 6 x 106 recombinants, of which 3 x 106
were amplified and stored at -70 C in SM buffer containing
7% DNSO. 3 x 106 pfu were mass excissed and the resulting
phagemids used to infect Topp10F. References: Science 253,
196-196 and Methods in Molecular Biology 97, 555-574.
Additional sequences from this library have been deposited
under the name Xenopus laevis dorsal blastopore lip.
Library constructed by Bruce Blumberg (University of
                                                                                                                          California, Irvine, Biology)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /tissue_type="dorsal blastopore lip"
/lab_host="TOP10"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Xenopus laevis"
/mol_type="mRNA"
/db_xref="taxon:8355"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  clone_lib="Blumberg_Cho dorsal_blastopore_lip"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    'sex="both"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        clone="IMAGE:7295911"
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     0
  Score 19.8; DB 8;
Pred. No. 8.4e+02;
0; Mismatches 2;
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0; Mismatches 2;
                                                                                                                                                 Department of Developmental and Cell
                                                Length 811;
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RESULT 21
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CN471390
                                                            DEFINITION
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### 88alpith003037 head Salmo Balar cDNA, CB500937 CB500937.1 GI:29312163 EST.
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Seq primer: CSVP3: AAGCCCGCAATTAACCCTCACTA.
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hh Ab Brain2000_00005240 A. burtoni Cichlid Brain cDNA
2000, Russell Fernald Astatotilapia burtoni cDNA clone
hh Ab Brain2000_00005240 5', mRNA sequence.
CN471390
CN471390.1 GI:46491834
                                                                                                                                                                                                                       1 GAACAGCAATACAACAAACCGTTGTG 26
                                                                             CB500937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7 Divinity Avenue,
Tel: 617-384-8058
Fax: 617 495 2196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: Hans A. Hofmann
Bauer Center for Genomics Research
Harvard University
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Haplochromini; Astatotilapia.

1 (bases 1 to 311)

Renn,S.C., Aubin-Horth,N. and Hofmann,H.A.

Biologically meaningful expression profiling across heterologous hybridization to a cDNA microarray BMC Genomics 5 (1), 42 (2004)
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Astatotilapia burtoni
                                                                                                                                                                                                                                                                                 Similarity
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BACKWARD: CSVP2: TTCCCAGTCACGACGTTGTAAA
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                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   hans@cgr.harvard.edu
                                                                                                                                                                                                                                                                                                                                                                                                                  /tissue_type="brain"
/dev stage="mixed"
/lab_host="XL1-Blue MRF' B.coli"
/clone lib="A. burtoni Cichlid Brain cDNA library 2000,
Russell Fernald"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Astatotilapia
/mol_type="mRNA"
/db_xref="taxon:8153"
                                                                                                                                                                                                                                                                                                                                                        /note="Vector: pBSIIsk-, Site_1: EcoR1; Site_2: Xho1; mRNA was isolated from the brains of A. burtoni for both sexes at all stages of development and reproductive status."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /clone="hh_Ab_Brain2000_000005240"
/sex="mixed"
                                                                                                                                                                                                                                                                               70.0%;
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                                                                                                                                                                                                                                                            Score 19.6; DB 8;
Pred. No. 9.5e+02;
0; Mismatches 4
                                                                               355
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                                                                                   mRNA
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                                                              mRNA
                                                                                                                                                                                                                                                                                                  Length 311;
                                                                                   linear
                                                                                 EST 16-MAY-2003
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1 (bases 1 to 355)

Rise, M.L., von Schalburg, K.R., Brown, G.D., Mawer, M.A., Devlin, R.H. Ruipers, N.Busby, M., Beetz-Sargent, M., Alberto, R., Gibbs, A.R., Hunt, P., Shukin, R., Zeznik, J.A., Nelson, C., Jones, S.R., Bmailus, D.E., Jones, S.J., Schein, J.E., Marra, M.A., Butterfield, Y.S., Stott, J.M., Mg, S.H., Davidson, M.S. and Koop, B.F. Development and application of a salmonid EST database and cDNA microarray; data mining and interspecific hybridization
                                                                          1 (bases 1 to 487)
Technau, U., Rudd, S., Maxwell, P., Gordon, P.M.K., Saina Grasso, L.C., Hayward, D.C., Sensen, C.W., Saint, R., Hol Ball, E.E. and Miller, D.U.
Maintenance of ancestral complexity and non-metazoan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3 ACAGCAATACAACAAACCGTTGTGTG 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Email: bkoop@uvic.ca
Centre for Blomedical Research, University of Victoria cDNA
preparation and sequencing: Roberto Alberto, Marianne
Beetz-Sargent, Maura Busby, Peter Hunt, Linda McKinnel, BF I
bioinformatics: Gordon D Brown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Contact: Koop BF
Centre for Biomedical Research
University of Victoria
PO Box 3020 STN CSC, Victoria BC, V8W 3N5, Canada
Tel: 250 472 4067
Fax: 250 472 4075
Trends Genet. (2005) In press
Contact: Ulrich Technau
Sars Centre for Marine Molecular Biology
                                                                                                                                                                                  Nematostella vectensis
Nematostella vectensis
Eukaryota, Metazoa; Chidaria; Anthozoa; Hexacorallia; Actiniaria;
Edwardsiidae; Nematostella.
                                                                                                                                                                                                                                                                                                                                               327-384-16_L07_T7 Nematostella vectensis normalized cDNA library 327 Nematostella vectensis cDNA clone 327-384-16_L07_T7, mRNA
                                                                                                                                                                                                                                                                                          DV085458.1 GI:82866851
                                                                                                                                                                                                                                                                                                                                                                                            DV085458
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                                                         basal cnidarians
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       salar (Atlantic salmon)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note="Vector: pBlueScriptIISK+; Library Creator: Kristian R von Schalburg; Atlantic salmon tissue contributors: Carlo Biagi, Mitch Uh and Robert Devlin (DFO, Vancouver, B.C.), Simon Jones (PBS, Nanaimo, B.C.), Seaspring Hatchery (Crofton, B.C.), Rachel Roper (University of Victoria)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /db_xref="taxon:8030"
/clone_lib="head"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  organism="Salmo salar"
mol_type="mRNA"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 19.6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No. 9.6e+02
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                                                                                                                                                                                                                                                                                                                                                                                            487 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 4;
                                                                                                                                                                                                                                                                                                                                                                                              mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 355;
                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                          Saina,
                                                                                                                           Holstein, T.W.,
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                                                                                genes in two
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                <u>,</u>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BF Koop
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AUTHORS
TITLE
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BE111725
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SOURCE
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                                                               FEATURES
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PUBMED
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 discovery
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/mol_type="mRNA"
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1 GAACAGCAATACAACAAACCGTTGTG 26
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Email: ulrich.technau@sars.uib.no plate: 16 row: 7 column: L seq primer: T7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eut
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
Sciurognathi; Murodea; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      High Technology Building, Thormohlensgt. 5 5008 Bergen, Norway
Tel: +47-55584340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bonaldo,M.F., Lennon,G. and Soares,M.B.
Normalization and subtraction: two approaches to facilitate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rattus norvegicus
                                                                                                       through Research Genetics (www.resgen.com)
                                                                                                                                                                                                                                                                                                                                                                           Coordinated Laboratory for Computational Genomics
                                                                                                                                                                                                                                                                                                                                                                                                Contact: Soares, MB
                                                                                                                                                                                                                                                                                                                                                                                                                                       Genome Res. 6 (9), 791-806 (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rattus norvegicus (Norway rat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BE111725.1 GI:8503830
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (bases 1 to 496)
                                                                                primer: M13 Forward
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note="Vector: pBluescript II SK(+); Site 1: NotI; Site 2: EcoRI; Normalized oligo dT primed cDNA library using poly A+ RNA from mixed embryonic stages of Nematostella vectensis. Cloned directionally into pBluescript II SK(+). Ligated in NotI, EcoRI"
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                     Location/Qualifiers
1. .496
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'tissue two-"-"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mol_type="mRNA"
/db_xref="taxon:45351"
/clone="327-384-16_L07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tissue_type="whole embryos"
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organism="Rattus norvegicus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  70.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
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Pred. No. 9.9e+02;
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strain="Sprague-Dawley"

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RESULT 24
AQ325004/c
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Magnaporthe grisea (anamorph: Pyricularia grisea)
Magnaporthe grisea
Magnaporthe grisea
Eukaryota, Fungi, Ascomycota; Pezizomycotina; Sordariomycetes;
Sordariomycetes incertae sedis; Magnaporthaceae; Magnaporthe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Seq primer: GGAAACAGCTATGACCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Clemson University Genomics Institute
Clemson University
100 Jordan Hall, Clemson Universiy, Clemson, SC 29634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Yu,Y., Zhu,H., Boyd,C.A., Gaudette,B., Gayle,A., Kingsbury,R., Phillips,K., Sasinowski,M, Wing,R.A. and Dean,R.A. A BAC End Sequencing Framework to Sequence the Magnaporthe grisea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AQ325004 579 bp DNA linear (mgxb0020B07r CUGI Rice Blast BAC Library Magnaporthe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 AACAGCAATACAACAAACCGTTGTGT 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Contact: Dean RA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unpublished (1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        clone mgxb0020B07r, genomic survey sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Email: rdean@clemson.edu
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864 656 4293
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Location/Qualifiers
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/lab host="PH108 (Life Technologies)"
/clone lib="UI-R-BJ1"
/clone lib="UI-R-BJ1"
/note="Vector: pT773D-Pac1; Site_1: Not I; Site_2: Eco RI;
/note="Vector: pT773D-Pac1; Site_1: Not I; Site_2: Eco RI;
/note="Vector: pT773D-Pac1; Site_1: Not I; Site_2: Eco RI;
/note="Vector: pT773D-Pac1; Site_1: Not I; Site_2: Eco RI;
/note="Vector: pT773D-Pac1; Site_1: Not I; Site_2: Eco RI;
/note="Vector: pT773D-Pac1; Site_1: Not I; Site_2: Eco RI;
/note="Vector: pT773D-Pac1; Site_1: Not I; Site_2: Eco RI;
/note="Vector: pT773D-Pac1; Site_2: Eco RI;
/note="Vector: pT77D-Pac1; S
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/clone="mgxb0020807r"
/tissue_type="Protoplasts"
/lab_host="B. coli DH10B"
/clone_lib="CUGI Rice Blast BAC Library"
/clone_lib="CUGI Rice Blast BAC Library"
/note="Vector: pBACWICH; Site_1: HindIII; Site_2: HindIII;
Rice blast is one of the most devestating fungal diseases
of rice world wide. It is a filamentous ascomycete with
a haploid genome (n=7) of approximately 40 Mbp. Rice
blast is an important model fungal pathogen for studying
numerous aspects of the fungal-host interaction. In
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         organism="Magnaporthe grisea"
/mol_type="genomic DNA"
/strain="70-15"
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Pred. No. 9.9e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 AACAGCAATACAACAAACCGTTGTGT 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Email: bohlmann@msl.ubc.ca
Plate: WS0198 row: A column: 22
High quality sequence stop: 658.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Genome BC forest genomics program University of British Columbia Michael Smith Laboratories, 6174 University Boulevard, Rm. Vancouver, British Columbia, Canada, V6T 1Z3 Tel: 1-604-822-0282 Fax: 1-604-822-2114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 (bases 1 to 658)
Ralph,S., Cooper,D., Kolosova,N., Oddy,C., Butterfield,Y.,
Ralph,S., Cooper,D., Kolosova,N., Oddy,C., Butterfield,Y.,
Kirkpatrick, Liu,J., Palmquist,D., Stott,J., Barber,S., Yang,G.,
Kirkpatrick, Brown-John,M., Chand,S., Featherstone,R., Masson,A.,
Babakaiff,R., Brown-John,M., Chand,S., Featherstone,R., Masson,A.,
Mayo,M., Moran,J., Olson,T., Wong,D., Ritland,C.E., Siddiqui,A.,
Mayo,M., Moran,J., Olson,T., Wong,D., Ritland,C.E., Siddiqui,A.,
Holt,R., Jones,S., Marra,M., Ellis,B.E., Douglas,C., Ritland,K. and
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Bukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The poplar transcriptome: Analysis of expressed sequence tags from multiple cDNA libraries
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: Joerg Bohlmann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unpublished (2004)
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/BEXE NOT determined"
//lab host="E. coli DH10B T1 phage resistant cells"
//lab host="E. coli DH10B T1 phage resistant cells"
//clone lib="PT-DX-N-A-10"
//c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mol_type="mRNA"
/cultivar="VT-125"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               clone="WS0198_A22"
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Pred. No. 1e+03;
0; Mismatches
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Normalization

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RESULT 27
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VERSION
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Best Local S
Matches 22
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OB_Ba0073I12.f OB
OB_Ba0073I12.f , ge
CL544775
                                                                                                                                 52
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Oryza brachyantha
Oryza brachyantha
Bukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Bukaryota; Viridiplantae; Lillopsida; Poales; Poaceae; BEP
Spermatophyta; Magnoliophyta; Lillopsida; Poales; Poaceae; BEP
clade; Bhrhartoideae; Oryzeae; Oryza.
CF234787
682 bp mRNA linear EST 05-AUG PtaJXT0015B4B0404 Poplar cDNA library from young tension xylem Populus alba x Populus tremula cDNA 5', mRNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FORWARD: TAA TAC GAC TCA CTA TAG GG
BACKWARD: CAC TCA TTA GGC ACC CCA
INSER'L Length: 145000 Std Brror: (
Plate: 0073 row: I column: 12
Seq primer: TAA TAC GAC TCA CTA TAG
Class: BAC ends.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Arizona Genomics Institute
University of Arizona
Forbes Building Room 303, Tucson,
Tel: 520 626 9595
Fax: 520 621 1259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PCR PRimers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kim, H., Yu, Y., Stum, D., Yost, D., Rao, K., Luo, M., Jetty, R.,
Kudrna, D., Muller, C., Hatfield, J., Soderlund, C. and Wing, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: rwing@genome.arizona.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unpublished (2004)
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                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                 /mol_type="genomic DNA"
/db_xref="taxon:4533"
/clone="OB_Ba0073112"
/tissue_type="leaves"
/dev_stage="mature"
/lab_host="PH10B"
/clone_lib="OB_Ba"
/note="Vector: pAGIBAC1; Site_1: HindIII; Site_2: HindIII"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .677
                                                                                                                                                                                                                                                                                                                                                                                                                                      organism="Oryza brachyantha"
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84.6%;
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Ba Oryza brachyantha genomic clone
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le+03;
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KEYWORDS
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CZ749731
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GSS.
Oryza coarctata (Porteresia coarctata)
Oryza coarctata
Oryza coarctata
Bukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; BEP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FORWARD: TriplexA 5' CTCGGGAAGCGCCCATTGTG 3' BACKWARD: TriplexB1 5' ATACGACTCACTATAGGGCGA 3' Plate: PtaJXT0015 row: B column: 4 Seq primer: TriplexA 5' CTCGGGAAGCGCCCATTGTG 3'.
                                                                                                                                              OC_Ba0099E06.r OC_Ba Oryza 3', genomic survey sequence. CZ749731
                                                                                                                                                                                                                                                                                                                                                                               2 AACAGCAATACAACAAACCGTTGTGT 27
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Fax: 33 02 38 41 78 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Expressed sequence tags from poplar wood tissues - A comparative analysis from multiple libraries plant Biol. 6 (1), 55-64 (2004)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Populus alba x Populus tremula
Bukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons;
rosids; eurosids I, Malpighiales; Salicaceae; Saliceae; Populus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: Jean-Charles.Leple@orleans.inra.fr
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                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /tissue_type="Young differentiating xylem harvested on the tension wood side of tilted trees"
/dev stage="3-years-old poplar trees grown in the nursery"
/clone_llb="poplar cNNA library from young tension xylem"
/note="A cDNA library was made with mRNA isolated from tension wood tissues corresponding to the differentiating xylem collected with a scalpel after debarking the stem.
The sampling was done on 3 different tilted trees grown in the nursery. cDNAs were cloned in an oriented way into SfiI (A and B) restriction sites. A one-step conversion of Lambda TriplExz to the corresponding pTriplExz plasmid was done via site-specific recombination at loxP sites
(Clontech ; SMART cDNA library construction kit). cDNA inserts were PCR amplified using flanking primers and then sequenced on a ABI3100 Genetic Analyser (Applied
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="mRNA"
/strain="clone 717-1-B4"
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Pred. No. 1e+03;
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BACKWARD: CAC TCA TTA GGC ACC CCA
Plate: 0099 row: E column: 06
Seq primer: CAC TCA TTA GGC ACC CCA
Class: BAC ends.
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BW085832 Nori Satoh unpublished cDNA library, larva Ciona
intestinalis cDNA clone rcilv043e07 3', mRNA sequence.
                                                                                                                                                                                                                                     Kyoto University
Sakyo-ku, Kyoto, Kyoto 606-8502,
Tel: 81-75-753-4081
Fax: 81-75-705-1113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ciona intestinalis
Ciona intestinalis
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                                                                                                                                                                                                                                                                                                                                                                                                                           Satou, Y., Shin-i, T., Kohara, Y. and Satoh, N. Expressed genes in Ciona intestinalis (2002c)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bukaryota; Metazoa; Chordata; Urochordata; Ascidiacea; Enterogona;
Phlebobranchia; Cionidae; Ciona.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BW085832.1
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                                                                                                                                                                                                                                                                                                                                          Contact: Nori Satch
Department of Zoology
                                                                                                                                                                                                                                                                                                                                                                                                  Unpublished (2002)
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im,H., Collura,K., Wissotski,M., Byrne,M., Stum,D., Smarr, D.,
im,H., Collura,K., Wissotski,M., Byrne,M., Stum,D., Smarr, D.,
im,H., Collura,K., Wissotski,M., Byrne,M., Stum,D., Smarr, D.,
im,H., Collura,K., Wissotski,M., Byrne,M., Stum,D., Smarr, D.,
im,H., Collura,K., Wissotski,M., Byrne,M., Stum,D., Smarr, D.,
im,H., Collura,K., Wissotski,M., Byrne,M., Stum,D., Smarr, D.,
im,H., Collura,K., Wissotski,M., Byrne,M., Stum,D., Smarr, D.,
im,H., Collura,K., Wissotski,M., Byrne,M., Stum,D., Smarr, D.,
im,H., Collura,K., Wissotski,M., Byrne,M., Stum,D., Smarr, D.,
im,H., Collura,K., Wissotski,M., Byrne,M., Stum,D., Smarr, D.,
im,H., Collura,K., Wissotski,M., Byrne,M., Stum,D., Smarr, D.,
im,H., Collura,K., Wissotski,M., Byrne,M., Stum,D., Smarr, D.,
im,H., Collura,K., Wissotski,M., Stum,D., Muller,C., Soderlund,C.,
im,H., Collura,K., Wissotski,M., Stum,D., Wissotski,M., Stum,D., Wissotski,M., Wissots
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/mol type="genomic DNA"
/db_Xref="taxon:77588"
/clone="OC_Ba009806"
/tissue_type="leaves"
/dev_stage="mature"
/clone="rcilv043e07"
/tissue_type="whole animal"
/dev_stage="larva"
                                                                           /organism="Ciona intestinalis"
/mol_type="mRNA"
/db_xref="taxon:7719"
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/clone_lib="OC_Ba"
/note="Vector: pAGIBAC1; Site_1: HindIII; Site_2: HindIII"
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Query Match
Best Local Similarity
                                                                                                                                                                                                                         DW577165
EST ssal rgb2 41584 rgb2 Salmo salar cDNA clone ssal rgb2 567_161_fwd 3', mRNA sequence.
DW577165
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Eukaryota; Metazoa; Chordata; Urochordata;
Phlebobranchia; Cionidae; Ciona.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
22; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BW089764 Nori Satoh unpublished cDNA library, larva Ciona intestinalis cDNA clone rcilv058d20 3', mRNA sequence.
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          Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Actinopterygii; Neopterygii; Teleostei; Euteleostei; Proteacanthopterygii; Salmoniformes; Salmonidae; Salmo. 1 (bases 1 to 737)

Koop,B.F. Davidson,W.S. and cGRASP Consortium.

Expressed Sequence Tags from Atlantic Salmon Unpublished (2006)

Unpublished (2006)
                                                                                                                                                 Salmo salar (Atlantic salmon)
Salmo salar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sakyo-ku, Kyoto, Kyo
Tel: 81-75-753-4081
Fax: 81-75-705-1113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 (bases 1 to 735)
Satou,Y., Shin-i,T., Kohara,Y. and Satoh,N.
Expressed genes in Ciona intestinalis (2002c)
Unpublished (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BW089764
                                                                                                                                                                                                         DW577165.1 GI:85048987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: satoh@ascidian.zool.kyoto-u.ac.jp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Contact: Nori Satoh
Department of Zoology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ciona intestinalis
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llarity 84.6%;
Conservative
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6
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/mol_type="mRNA"
/db xref="taxon:7719"
/clone="rcilv058d20"
/tissue_type="whole animal"
/dev_stage="larva"
/clone_lib="Nori Satoh unpublished cDNA library,
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; Pred. No. 1e+0
0; Mismatches
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AUTHORS
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ACCESSION
VERSION
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CA064299
  FEATURES
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Best Local S
Matches 22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            692
                           Email: bkoop@uvic.ca
Genome Sciences Centre, BC Cancer Agency
Genome Sciences Centre, BC Cancer Agency
CDNA preparation, sequencing and bioinformatics:
Y Butterfield, R Kirkpatrick, J Asano, N Girn, R
S Lee, T Olson, P Pandoh, A Prahbu, D Smailus, L
S Taylor, G Yang, J Schein, S Jones and M Marra.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: bkoop@uvic.ca
Sequenced by: Genome Sciences Centre, BC Cancer Agency Rob Holt, M.
Marra. Bioinformatics: Centre for Biomedical Research, University
of Victoria Jong Leong, BF Koop.
Insert Length: 737 Std Error: 0.00
                                                                                                                                                                                                                                                                                                                                                             Kuipers,N., Busby,M., Beetz-Sargent,M., Alberto,R., Gibbs,A.R., Hunt,P., Shukin,R., Zeznik,J.A., Nelson,C., Jones,S.R., Smailus,D.E., Jones,S.J., Schein,J.E., Marra,M.A., Butterfield,Y.S., Stott,J.M., Ng,S.H., Davidson,W.S. and Koop,B.F. Development and application of a salmonid EST database and cDNA microarray: data mining and interspecific hybridization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  753 bp
smalrgb530194 mixed_tissue Salmo
CA064299
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                                                                                                                                                                                                              Contact: Koop BF
Centre for Biomedical Research
University of Victoria
PO Box 3020 STN CSC, Victoria BC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Teleostei; Euteleostei; Protacanthopterygii; Salmoniformes; Salmonidae; Salmo. 1 (bases 1 to 753)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Seq primer: M13 Forward
High quality sequence stop: '
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Centre for Biomedical Research
University of Victoria
PO Box 3020 STN CSC, Victoria BC,
                                                                                                                                                                        Tel: 250 472 4067
Fax: 250 472 4075
                                                                                                                                                                                                                                                                                                                             Genome Res. 14 (3), 478-490 (2004)
                                                                                                                                                                                                                                                                                                                                                    characteristics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rise, M.L., von Schalburg, K.R., Brown, G.D., Mawer, M.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Salmo salar (Atlantic salmon)
Salmo salar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CA064299.1 GI:24394542
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Fax: 250 472 4075
                                                                                                                                                                                                                                                                                                         14962987
                      POLYA=Yes
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/tissue type="mixed tissue"
/clone Tib="rgb2"
/note="Organ: brain, kidney, spleen; Vector: pCMVsport6;
ssalrgb2 mixed_tissue Salmo salar cDNA; Tissue
contributors: Robert Devlin (DFO, Vancouver, B.C.)"
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        db_xref="taxon:8030"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               strain="McConnell"
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84.6%;
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; Pred. No. 1e+0
0; Mismatches
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                                                             R Guin, D Lee,
L Spence, J St
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REFERENCE
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ACCESSION
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CA056575
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1 (bases 1 to 764)

Rise, M.L., von Schalburg, K.R., Brown, G.D., Mawer, M.A., Devlin, R.H. Rise, M.L., von Schalburg, K.R., Brown, G.D., Mawer, M.A., Devlin, R.H. Ruipers, N., Busby, M., Beetz-Sargent, M., Alberto, R., Gibbs, A.R., Hunt, P., Shukin, R., Zeznik, J.A., Nelson, C., Jones, S.R., Smallus, D.E., Jones, S.J., Schein, J.E., Marra, M.A., and Koop, B.F. Butterfield, Y.S., Stott, J.M., Ng, S.H., Davidson, M.S. and Koop, B.F. Development and application of a salmonid EST database and cDNA microarray: data mining and interspecific hybridization characteristics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Genome Sciences Centre, BC Cancer Agency
CDNA preparation, sequencing and bioinformatics:
Y Butterfield, R Kirkpatrick, J Ason NGirn, R Guin, D Lee,
Y Elee, T Olson, P Pandoh, A Prahbu, D Smailus, L Spence, J St.
S Taylor, G Yang, J Schein, S Jones and M Marra.
Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Centre for Biomedical Research
University of Victoria
PO Box 3020 STN CSC, Victoria
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CA056575
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Email: bkoop@uvic.ca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Contact: Koop BF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          characteristics |
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/ GAS-...
/ mol type="mkwn / mol type="mkwn / mol type="mkwn / mol type="mkwn / mol type="mkwn / mol type="mkconnell" / mol type="mkconnell" / mol type="mkconnell" / mol type="mkcolor: pcMvsport6; Library Creator: Research / note="vector: pcMvsport6; Library Creator: Carlo Genetics; Atlantic salmon tissue contributors: Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics; Carlo Genetics;
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/db xref="taxon:8030"
/db xref="taxon:8030"
/clone lib="mixed tissue"
/clone lib="mixed tissue"
/note="Vector: pcMVsport6; Library Creator: Research
/enetics; Atlantic salmon tissue contributors: Carlo
Biagi, Mitch Uh and Robert Deviin (DFO, Vancouver, B.C.),
Simon Jones (PBS, Nanaimo, B.C.), Seaspring Hatchery
(Crofton, B.C.), Rachel Roper (University of Victoria)"
                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Salmo salar"
/mol_type="mRNA"
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Query Match Best Local Similarity

70.0%; 84.6%;

Score Pred.

No. 1e+03;

4;

Length 764,

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RESULT 35
BU255194/c
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CB643162/c
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PUBMED
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sequence.
BU255194
BU255194.1
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Oryza sativa (japonica cultivar-group)
Oryza sativa (japonica cultivar-group)
Eukaryota, Viridiplantae, Streptophyta, Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; BEP
clade, Ehrhartoideae; Oryzeae; Oryza.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Arizona Genomics Institute
University of Arizona
Biological Sciences West,
85721-0088, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 (bases 1 to 782)
Jantasuriyarat,C., Gowda,M., Haller,K., Hatfield,J., Lu,G.,
Jantasuriyarat,C., Gowda,M., Kim,H., Yu,Y., Dean,R.A., Wing,R.A.,
Stahlberg,E., Zhou,B., Li,H., Kim,H., Yu,Y., Dean,R.A., Wing,R.A.,
Soderlund,C. and Wang,G.L.
Soderlund,C. and Wang,G.L.
Large-scale identification of expressed sequence tags involved in
rice and rice blast fungus interaction
Plant Physiol. 138 (1), 105-115 (2005)
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OSJNEb03L08.r OSJNEb Oryza sativa (japonica cultivar-group)
Clone OSJNEb03L08 3', mRNA sequence.
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                                                           BU255194 792
603746126F1 CSEQCHN38 Gallus
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Plate: 03 row: L column: 08
Seq primer: 99a aac agc tat gac cat
Location/Qualifiers
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Fax: 520 621 9288
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               rwing@genome.arizona.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Oryza sativa (
/mol type="mRNA"
/cultivar="Nipponbare"
/db xref="taxon:39947"
/clone="OSJNEb03L08"
                                                                                                                                                                                                                                                                                                                                                                                                                               /tissue_type="Leaf"
/dev_stage="3 week"
/lab_host="DH10B"
/clone_lib="OSJNEb"
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GI:25511921
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                                                           mRNA linear EST 26-NOV-2002 cDNA clone ChEST651c8 5', mRNA
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                                                       Ciona intestinalis
Ciona intestinalis
Ciona intestinalis
Eukaryota, Metazoa; Chordata; Urochordata; Ascidiacea; Enterogona;
Enterogona;
Phlebobranchia; Cionidae; Ciona.
1 (bases I to 793)
Satou,Y., Shin-1,T., Kohara,Y. and Satoh,N.
Expressed genes in Ciona intestinalis (2002c)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22;
                                                                                                                                                                                                                                                               BW087205 Nori Satoh unpublished cDNA library, larva Ciintestinalis cDNA clone rcilv048h03 3', mRNA sequence
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1 (bases 1 to 792)

1 (bases 1 to 792)

Boardman, P.E., Sanz-Ezquerro, J., Overton, I.M., Burt, D.W., Bosch, E., Fong, W.T., Tickle, C., Brown, W.R.A., Wilson, S.A. and Hubbard, S.J. A Comprehensive Collection of Chicken cDNAs

Curr. Biol. 12 (22), 1965-1969 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EST.
Gallus gallus (chicken)
                 Unpublished (2002)
Contact: Nori Sato
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Contact: Simon Hubbard
Department of Biomolecular Sciences
University of Manchester Institute of Science and Technology
                                                                                                                                                                                                                         BW087205.1 GI:24262485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Email: Simon. Hubbard@umist.ac.uk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gallus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Gallus gallus"
/mol type="mRNA"
/strain="White Leghorn, Hi.
/db xref="taxon:9031"
/clone="ChEST651C8"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            dev_stage="36"
lab_host="DH10B"
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Pred. No. 1e+03;
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DW577166/c
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Matches 22
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Sakyo-ku, Kyoto, Kyot
Tel: 81-75-753-4081
Fax: 81-75-705-1113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99
                                                                                                                                                                                                                                                                                                                        Email: bkoop@uvic.ca
Sequenced by: Genome Sciences Centre, BC Cancer Agency Rob Holt, M.
Marra. Bioinformatics: Centre for Biomedical Research, University
of Victoria Jong Leong, BF Koop.
Insert Length: 822 Std Error: 0.00
Plate: 567
Seq primer: M13 Reverse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Koop BF
Centre for Biomedical Research
University of Victoria
PO Box 3020 STN CSC, Victoria BC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EST seal rgb2 41585 rgb2 Salmo salar cDN seal rgb2_567_161_rev 5', mRNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tel: 250 472 4067
Fax: 250 472 4075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Actinopterygii; Neopterygii; Teleostei; Euteleostei; Protacanthopterygii; Salmoniformes; Salmonidae; Salmo. 1 (bases 1 to 822)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Salmo salar (Atlantic salmon)
Salmo salar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Koop, B.F, Davidson, W.S. and cGRASP Consortium
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Email: satoh@ascidian.zool.kyoto-u.ac.jp.
                  Similarity
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Location/Qualifiers
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                                                                               /db_xref="taxon:8030"
/clone="ssal_rgb2_567_161_rev"
/tissue="type="mixed tIssue"
/clone_Itype="mixed tIssue"
/clone_Itype="mixed tIssue"
/clone_Itype="mixed tissue"
/note="Organ: brain, kidney, spleen; Vector: pCMVsport6;
ssalrgb2 mixed_tissue Salmo salar cDNA; Tissue
contributors: Robert Devlin (DFO, Vancouver, B.C.)"
                                                                                                                                                                                                                                                                         1. .822
                                                                                                                                                                                                                /mol_type="mRNA"
/strain="McConnell"
                                                                                                                                                                                                                                                 organism="Salmo salar"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /db_xref="taxon:7719"
/clone="rcilv048h03"
/rissue_type="whole animal"
/dev_stage="larva"
/clone_lib="Nori Satoh unpublished cDNA library,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Ciona intestinalis"
/mol_type="mRNA"
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CG219751/c
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Zea mays
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1 (bases 1 to 832)

Whitelaw, C.A., Quackenbush, J., Van Aken, S., Utterback, T., Resnick, A., Fraser, C.M., Budiman, M.A., Bedell, J.A., Rohlfing, T., Citek, R.W., Numberg, A., Robbins, D. and Lakey, N. Consortium for Maize Genomics
Unpublished (2002)
Other_GSSs: OGWLQ26TV
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            1 (bases 1 to 839)
Whitelaw, C.A., Quackenbush, J., Van Aken, S., Utterback, T.,
Resnick, A., Fraser, C.M., Budiman, M.A., Bedell, J.A., Rohlfing, T.,
Citek, R.W., Nunberg, A., Robbins, D. and Lakey, N.
                                                                                                                                                                genomic survey sequence
CG452337
CG452337.1 GI:34837337
GSS.
                                                                             Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD clade; Panicoldeae; Andropogoneae; Zea.
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Class: methylation filtered.
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OGWLQ26TH ZM_0.7
Consortium for Maize Genomics
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Fax: 301-838-0208
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9712 Medical Center Drive,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Contact: Cathy Whitelaw
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/clone=lib="ZM 0.7 1.5 KB"
/note="Vector: pBCSK.; Site 1: HincII; 0.7-1.5
methylation filtered genomic DNA library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /db_xref="taxon:4577"
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CG219765
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1 (bases 1 to 959)

Whitelaw,C.A., Quackenbush,J., Van Aken,S., Utterback,T.,
Resnick,A., Fraser,C.M., Budiman,M.A., Bedell,J.A., Rohlfing,T.,
Citek,R.W., Nunberg,A., Robbins,D. and Lakey,N.
Consortium for Maize Genomics
Unpublished (2002)
Other_GSSs: GGMLQ26TH
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Other GSSs: OGVHQ26TH
Contact: Cathy Whitelaw
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OGWLQ26TV ZM_0.7_1.5_KB
                                                                                                                                                                                                                                                                                 9712 Medical Center Drive, Rockville, MD 20850, USA Tel: 301-838-5843 Fax: 301-838-0208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopaida; Poalea; Poaceae; PACCAD
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Location/Qualifiers
                                                                                                                                                                                                               Class: methylation filtered.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                    Contact: Cathy Whitelaw
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                                                                                                                                                                                                                                                  Seq primer: TF
                                                                                                                                                                                                                                                                Email: whitelaw@tigr.org
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                                                         /db_xref="taxon:4577"
/clone="zwMBMa0612F03"
/clone lib="ZM 0.7 1.5 KB"
/note="Vector: pBCSk-, Site 1: HincII; 0.7-1.5 methylation filtered genomic DNA library"
                                                                                                                                                /organism="Zea mays"
/mol_type="genomic DNA"
/strain="B73"
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/clone_lib="ZM_0.7_1.5_KB"
/note="Vector: pBCSK:, Site_1: HincII; 0.7-1.5
methylation filtered genomic DNA library"
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/strain="B73"
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84.6%;
70.0%;
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Pred. No. 1e+03;
0; Mismatches 4;
 Score 19.6; DB 12;
Pred. No. 1e+03;
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CZ104695
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DE039251
LOCUS
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                                                                                                                  sequence.
DE039251
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GSS.
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Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnollophyta; Liliopsida; Poales; Poaceae; BEP
clade; Ehrhartoideae; Oryzeae; Oryza.
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genomic survey s
CZ104695
                                                                       Branchiostoma floridae (Florida lancelet)
Branchiostoma floridae
Bukaryota; Metazoa; Chordata; Cephalochor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Email: rwing@genome.arizona.edu Plate: 0113 row: L column: 07 Class: BAC ends.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Arizona Genomics Institute
University of Arizona
Forbes Building Room 303, Tucson,
Tel: 520 626 9595
Fax: 520 621 1259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OMAP (Oryza Map Alignment Project) - Unpublished (2005)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GSS.
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Fujiyama, A., Toyoda, A., Kuroki, Y. and Sakaki, Y. BAC end sequences of CHORI-302 Amphioxus Library Published Only in Database (2005)
                                                                                                                                                                             Branchiostoma floridae DNA,
                                                                                                                                                                                                                                                                                                7 CAATACAACAAACCGTTGTGT
                                                           Branchiostoma
                                                                                                                                                                                           DE039251
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Kim,H., Collura,K., Wissotski,M., Byrne,M., Stum,D., Smart,D.,
Rao,K., Luo,M., Jetty,R., Kudrna,D., Muller,C., Soderlund,C. a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Oryza minuta
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                                                                                                                                                                                                                                                                                                                                                                                                        HindIII"
                                                                                                                                                                                                                                                                                                                                                                                                                   /tissue_type="leaves"
/lab_host="pH10B"
/clome_lib="OM_Ba"
/note="Vector: pCUGIBAC1; Site_1: HindIII; Site_2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Oryza minuta"
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/db_xref="taxon:63629"
/clone="OM__Ba0113L07"
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                                                                                                                                    GI:62283060
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Pred. No. 1.
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                                                                       Cephalochordata; Branchiostomidae;
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CH302-061024.F,
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source
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McCarter, J. Clitton, S., Chiapelli, B., Pape, D., Martin, J.,
Mylie, T., Dante, M., Marra, M., Hillier, L., Kucaba, T., Theising, B.,
Bowers, Y., Gibbons, M., Ritter, B., Bennett, J., Franklin, C.,
Tsagareishvili, R., Ronko, I., Kennedy, S., Maguire, L., Beck, C.,
Underwood, K., Steptoe, M., Allen, M., Person, B., Swaller, T.,
Underwood, K., Steptoe, M., Allen, M., Person, B., Swaller, T.,
Harvey, N., Schurk, R., Kohn, S., Shin, T., Jackson, Y., Cardenas, M.,
McCann, R., Waterston, R. and Wilson, R.
The Washington Univ. Nematode EST Project, 1999
Unpublished (1999)
Contact: McCarter JP
The Washington Univ. Nematode EST Project, 1999
Washington Univ. Nematode EST Project, 1999
Washington Univ. Nematode EST Project, 1999
Washington University School of Medicine
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Submitted (31-MAR-2005) Asao Fujiyama, The Institute of Physical
submitted (31-MAR-2005) Asao Fujiyama, The Institute of Physical
and Chemical Research (RIKEN), Genomic Sciences Center (GSC);
1-7-22 Suehiro-chou, Tsurumi-ku, Yokohama, Kanagawa, 230-0045, Japan
(B-mail:afujiyam@gsc.riken.jp, URL:http://hgp.gsc.riken.jp/,
Tel:81-45-503-9111, Fax:81-45-503-9170)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BQ626730 524 bp mRNA linear EST 01-JUL-2002 pz26b03.yl Pratylenchus penetrans mixed stage SL1 TOPO v1 Pratylenchus penetrans cDNA 5' similar to SW:RS15_HUMAN P11174 40S RIBOSOMAL PROTBIN S15 , mRNA sequence.
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Fujiyama, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21;
                  The library was constructed by Claire Murphy and Dr. James McCarat Washington University, St. Louis. RNA was provided by Andrew Kloek of Divergence Inc., St. Louis, MO.
Putative full length read
The vector to vector length is 567
Seq primer: SL1 primer.
Location/Qualifiers
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Tylenchoidea; Pratylenchidae; Pratylenchinae; Pratylenchus
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                                                                                                                                                                                                                            Tel: 314 286 1800
Fax: 314 286 1810
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R.Site 2
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                                                                                                                                                                                                    est@watson.wustl.edu
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/clone_lib="CHORI0302 Amphioxus
/note="common name:amphioxus"
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/db_xref="taxon:7739"
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87.5%;
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Pred. No. 1.5e+03;
0; Mismatches 3;
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                                                                                                                                                                          James McCarter
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ORGANISM
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BQ627018
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Best Local S
Matches 21
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(Carter, J., Chiapelli, B., Pape, D., Martin, J., WcCarter, J., Chifton, S., Chiapelli, B., Roba, T., Theising, B., Wylie, T., Dante, M., Marra, M., Hillier, L., Kucaba, T., Theising, B., Bowers, Y., Gibbons, M., Ritter, E., Bennett, J., Franklin, C., Bowers, Y., Gibbons, M., Ritter, E., Bennett, J., Franklin, C., Tagagareishvili, R., Ronko, I., Kennedy, S., Magyire, L., Beck, C., Underwood, K., Steptoe, M., Allen, M., Person, B., Sweller, T., Harvey, N., Schurk, R., Kohn, S., Shin, T., Jackson, Y., Cardenas, M., Harvey, N., Schurk, R., Kohn, S., Shin, T., Jackson, Y., Cardenas, M., McCann, R., Waterston, R., and Wilson, R.
The Washington Univ. Nematode EST Project, 1999
Unpublished (1999)
Contact: McCarter JP.
The Washington Univ. Nematode EST Project, 1999
The Washington Univ. Nematode EST Project, 1999
The Washington Univ. Nematode EST Project, 1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           pz30b06.yl Pratylenchus penetrans mixed stage SL1 TOPO vl Pratylenchus penetrans mixed stage SL1 TOPO vl Pratylenchus penetrans cDNA 5' similar to SW:RS15_HUMAN P11174 40S RIBOSOMAL PROTEIN S15 ;, mRNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tel: 314 286 1800
Fax: 314 286 1810
Email: est@watson.wustl.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The Washington Univ. Nematode EST Project, 1999 Washington University School of Medicine 4444 Forest Park Parkway, Box 8501, St. Louis, N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pratylenchus penetrans
Eukaryota; Metazoa; Nematoda; Chromadorea; Tylenchida; Tylenchina;
Tylenchoidea; Pratylenchidae; Pratylenchinae; Pratylenchus.
                                                                                                                                                                                                                                                                                                                 at Washington University, St. Louis.
Klock of Divergence Inc., St. Louis,
Putative full length read
The vector to vector length is 576
                                                                                                                                                                                                                                                                                                                                                                                                                                           The library was constructed by Claire Murphy
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                              /organism="Pratylenchus penetrans"
/mol_type="mRNA"
/db_xref="taxon:45929"
/dev_stage="mixed stage"
/lab_host="DH10B (Invitrogen)"
/clone_lib="Pratylenchus penetrans mixed stage SL1 TOPO
v1"
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|mol type="mRNA"
|/db_xref="taxon:45929"
|/dev_stage="mixed stage"
|/lab_host="DH10B (Invitrogen)"
                                                                                                                                                                                                                                                             Location/Qualifiers
/note="Vector: pCRII-TOPO (Invitrogen); Site_1: EcoRI;
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Pred. No. 1.
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BQ627107
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Wylie, T., Dante, M., Marra, M., Hillier, L., Kucaba, T., Theising, B., Bowers, Y., Gibbons, M., Ritter, E., Bennett, J., Franklin, C., Tsagareishvili, R., Ronko, I., Kennedy, S., Maguire, L., Beck, C., Underwood, K., Steptoe, M., Allen, M., Person, B., Swaller, T., Harvey, N., Schurk, R., Kohn, S., Shin, T., Jackson, Y., Cardenas, M., McCann, R., Waterston, R. and Wilson, R.
The Washington Univ. Nematode EST Project, 1999
Unpublished (1999)
Contact: McCarter JP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 at Washington University, St. Louis. RNA
Kloek of Divergence Inc., St. Louis, MO.
Putative full length read
The vector to vector length is 555
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Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
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McCarter, J., Clifton, S., Chiapelli, B., Pape, D., Martin, J.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Email: est@watson.wustl.edu
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Tylenchoidea; Pratylenchidae; Pratylenchinae; Pratylenchus.
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314 286 1810
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/note="Vector: pCRII-TOPO (Invitrogen); Site_1: EcoRI; Site_2: EcoRI; The library was constructed by Claire Murphy and Dr. James McCarter at Washington University, St. Louis. Oligo(dT)-SL1 PCR based library. cDNA PCR products of size >400 nucleotides containing SL1 on the 5' end and oligo(dT) on the 3' end were non-directionally cloned into pCRII-TOPO(Invitrogen) following the Topo TA cloning protocol. RNA was provided by Andrew Kloek of Divergence, Inc., St. Louis, MO."
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                                                                                                                                                                                                                                                                                                                                                         /organism="Pratylenchus
/mol_type="mRNA"
/db_xref="taxon:45929"
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                  'dev_stage="mixed stage"
'lab_host="DH10B (Invitrogen)"
/clone_lib="Pratylenchus penetrans mixed stage SL1 TOPO
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Pred. No. 1.5e
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Conservative

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BQ626527
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                                                                            ORIGIN
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Query Match
Best Local Similarity
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NCCarter, J., Clifton, S., Chiapelli, B., Pape, D., Martin, J., Wylie, T., Dante, M., Marra, M., Hillier, L., Kucaba, T., Theising, B., Bewers, Y., Gibbons, M., Ritter, E., Bennett, J., Franklin, C., Taggareishvili, R., Ronko, I., Kennedy, S., Maguire, L., Beck, C., Underwood, K., Steptoe, M., Allen, M., Person, B., Swaller, T., Harvey, N., Schurk, R., Kohn, S., Shin, T., Jackson, Y., Cardenas, M., McCann, R., Waterston, R. and Wilson, R.
The Washington Univ. Nematode EST Project, 1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  80626527 573 bp mRNA linear EST 01-JUL-2002 pz11d01.y1 Pratylenchus penetrans mixed stage SL1 TOPO v1 Pratylenchus penetrans cDNA 5' similar to SW:RS15_HUMAN P11174 40S RIBOSOMAL PROTEIN S15; mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The library was constructed by Claire Murphy and Dr. James McCarter at Washington University, St. Louis. RNA was provided by Andrew Kloek of Divergence Inc., St. Louis, MO. Putative full length read The vector to vector length is 574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tel: 314 286 1800
Fax: 314 286 1810
Email: est@watson.wustl.edu
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The Washington Univ. Nematode EST Project, Washington University School of Medicine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pratylenchus penetrans
Bukaryota, Metazoa, Nematoda, Chromadorea, Tylenchida, Tylenchina,
Tylencholdea, Pratylenchidae, Pratylenchinae, Pratylenchus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BQ626527.1 GI:21653705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: McCarter JP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pratylenchus penetrans
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         primer: SL1 primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  quality sequence stop: 525
Location/Qualifiers
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                                                                                             /note="Vector: pCRII-TOPO (Invitrogen); Site 1: BcoRI; Site 2: BcoRI; The library was constructed by Claire Murphy and Dr. James McCarter at Washington University, St. Louis. Oligo(GT)-SLI PCR based library. cDNA pCR products of size >400 nucleotides containing SLI on the 5' end and oligo(GT) on the 3' end were non-directionally cloned into pCRII-TOPO(Invitrogen) following the Topo TA cloning protocol. RNA was provided by Andrew Kloek of Divergence, Inc., St. Louis, MO."
                                                                                                                                                                                                                                                                                                                                                              /dev stage="mixed stage"
/lab_host="DH10B (Invitrogen)"
/clone_lib="Pratylenchus penet:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 organism="Pratylenchus penetrans"
                                                                                                                                                                                                                                                                                                                                                                                                                                                xref="taxon:45929"
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68.6%;
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Score 19.2; DB 3;
Pred. No. 1.5e+03;
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Pred. No. 1.5e+03;
D; Mismatches 3
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RESULT 47
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KEYWORDS
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                                                                                                                                        RESULT 48
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Best Local Similarity
Matches 21; Conserv
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PUBMED
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783 bp mRNA linear EST 16-JUN-2005
49110365 Drosophila pseudoobscura embryonic cDNA library Drosophila
pseudoobscura cDNA clone K19 3', mRNA sequence.
DR154444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae; Gallus.

1 (bases 1 to 707)

Boardman, P.E., Sanz-Ezquerro, J., Overton, I.M., Burt, D.W., Bosch, B., Fong, W.T., Tickle, C., Brown, W.R.A., Wilson, S.A. and Hubbard, S.J. A Comprehensive Collection of Chicken cDNAs

Curr. Biol. 12 (22), 1965-1969 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PO Box 88, Manch
Tel: 01612008930
Fax: 01612360409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BU220286 707 bp n 603107182F1 CSEQCHN04 Gallus gallus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Department of Biomolecular Sciences
University of Manchester Institute of Science and Technology
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                                                                                                                                                                                                                          GAACAGCGATATAACAAAACGTTG 352
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                /notes Objective to the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part of the part o
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s cDNA clone ChEST48c21 5', mRNA
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AUTHORS
TITLE
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AUTHORS
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Best Local S
Matches 21
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                 Unpublished (1999)
Contact: Robert Strausberg,
Email: cgapbs-r@mail.nih.go
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21;
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Gilbert Smith,
                                                                                                                                                                                                                                                                                                                                     BI153495.1 GI:14613496
EST.
                                                                                                                                                                                                                                                                                                                                                                                          BI153495
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Insert Length: 1750 Std Erro
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Baylor College of Medicine
                                                                                                                                                                                                                                                                                                        Mus musculus (house mouse)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Contact: Stephen Richards
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Pred. No. 1.5e+03;
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KEYWORDS
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                                                             Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalla; Eutheria; Euarchontoglires; Glires; Rodentia;
Sciurognathi; Muroidea; Muridae; Murinae; Mus.

1 (bases 1 to 817)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Drosophila pseudoobscura
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
1 (bases 1 to 783)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BI153495
B17 bp mRNA linear EST 05-JUL-2001
602915583F1 NCI_CGAP_Lu29 Mus musculus cDNA clone IMAGE:5066108 5',
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DR154444.1 GI:67899534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /dev_stage="0-18h embryos"
/clone_lib="Drosophila pseudoobscura embryonic cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            organism="Drosophila pseudoobscura"
|mol_type="mRNA"
|db_xref="taxon:7237"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note="Vector: pOTB7; Site_1: EcoRI; Site_2: XhoI; oligo
it priming from poly A+ RNA, directionally cloned"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 783;
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REFERENCE
AUTHORS
TITLE
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ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
ACCESSION
VERSION
KEYWORDS
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CT474369
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                                                                                                                                                  ORIGIN
                                                                                                                                                                                                                                                                                                                                       FEATURES
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                                                                 Query Match
Best Local Similarity
Matches 21; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sus scrofa genomic clone CH242-469H10, CT474369 CT474369.1 GI:80214467 GSS.
                                                                                                                                                                                                                                                                                                                                 Humphray, S.J., Plumb, R.W. and Durham, J.L.

Direct Submission

Submitted (01-NOV-2005) The Sanger Institute, Wellcome Trust Genome Submitted (01-NOV-2005) The Sanger Institute, Wellcome Trust Genome Campus, Hinxton, Cambridgeshire, CB10 18A, UK. E-mail enquiries: humquery@sanger.ac.uk Unpublished

This sequence was generated from the T7 end of BAC 469H10. 469H10 is part of the CHORI-242 BAC Library created by P. de Jong. Further details: http://www.sanger.ac.uk/Projects/S_scrofa/.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 AACAGCAATACAACAAACCGTTGT 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM11178 row: e column: 21
5 AGCAATACAACAAACCGTTGTGTG 28
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Suina; Suidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sus scrofa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sus scrofa (pig)
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Similarity 87.5%;
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Location/Qualifiers
                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /tissue_type="spontaneous tumor, metastatic to mammary.
Stem cell origin."
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/clone_lib="NCI_CGAP_Lu29"
/note="Organ: lung; Vector: pCMV-SPORT6; Site_1: Sall;
Site_2: Not1; Cloned unidirectionally. Primer: Oligo dT.
Library constructed by Life Technologies. Investigator
providing samples: Gilbert Smith, NIH"
                                                                                                                                                                   sex female"
                                                                                                                                                                                   /clone="CH242-469H10"
/tissue_type="White blood cells"
/note="vector pTARBAC1.3_BamHI
                                                                                                                                                                                                                                                    /organism="Sus scrofa"
/mol_type="genomic DNA"
/db_xref="taxon:9823"
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'clone="IMAGE:5066108"
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'strain="Czech II"
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                                                                              68.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 19.2; DB 2;
Pred. No. 1.5e+03;
                                                                 Score 19.2; DB 14;
Pred. No. 1.5e+03;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        genomic survey sequence.
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